

**STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL PROTECTION**



**MARTIN EXPANSION PROJECT
FLORIDA POWER & LIGHT**

**CONDITIONS OF CERTIFICATION
Modification M (PA89-27M)**

Modified 08/21/08

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I. CERTIFICATION CONTROL

A. Pursuant to s. 403.501-518, F.S., the Florida Electrical Power Plant Siting Act, this certification is issued to Florida Power and Light Company (FPL) owner/operator of the Martin Power Plant. Under the control of these Conditions of Certification the FPL will operate the Martin Expansion Project consisting of two natural gas-fired Combined Cycle Units No. 3 and No. 4 (each 450 MW nominal) Unit 8, a "4 on 1" Combined Cycle Gas Turbine facility (total 1100 MW Nominal) and ancillary equipment, and the Martin Solar Energy Center. The Martin Expansion Project includes future facilities, given preliminary approval, namely gas-fired Combined Cycle Units renewable energy facilities; those facilities will require approval in subsequent proceedings under the Act. These units are located on an 11,300-acre site located in Sections 29&30/Township 39 South/Range 37 East in southwestern Martin County;

B. The general and specific conditions contained in these Conditions of Certification, unless specifically amended or modified, are binding upon the Licensee and shall apply to the construction and operation of the certified facility. If a conflict should occur between the design criteria of this project and the Conditions of Certification, the Conditions shall prevail unless amended or modified.

II. APPLICABLE RULES

The construction and operation of the certified facility shall be in accordance with all applicable provisions of Florida Statutes and Department and Water Management District rules, including the following regulations: [South Florida WMD: 40E-2, 40E-3, 40E-4, 40E-6, 40-E20] 62-4, 62-17, 62-256, 62-296, 62-297, 62-301, 62-302, 62-531, 62-532, 62-550, 62-555, 62-560, 62-600, 62-601, 62-604, 62-610, 62-620, 62-621, 62-650, 62-699, 62-660, 62-701, and 62-814, Florida Administrative Code (F.A.C.), or their successors as they are renumbered, as these regulations existed on the date of the certification of a specific phase, or as they may become applicable pursuant to subsection 403.511 5(a), F.S.

III. DEFINITIONS

Unless otherwise indicated herein, the meaning of the terms used herein shall be governed by the definitions contained in Chapters 403, 378, 373, and 253, Florida Statutes and any regulation adopted pursuant thereto and the statutes and regulations of any agency. In the event of any dispute over the meaning of a term used in these conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definition contained in any other state or federal statute or regulation or, in the alternative, by the use of the commonly accepted meaning as determined by the Department of Environmental Protection:

A. "Application" shall mean the Site Certification Applications for the Martin Coal Gasification/Combined Cycle (CG/CC) Project, peaking units 8A and 8B and

Combined Cycle Unit 8, and the Martin Solar Energy Center site modification request as supplemented.

B. "DEP" shall mean the Florida Department of Environmental Protection.

C. "Emergency conditions" shall mean urgent circumstances involving potential adverse consequences to human life or property as a result of weather conditions or other calamity, and necessitating new or replacement operating equipment, gas pipeline, transmission lines, or access facilities.

D. "Feasible" or "practicable" shall mean reasonably achievable considering a balance of land use impacts, environmental impacts, engineering constraints, and costs.

E. "FWC" shall mean the Florida Fish and Wildlife Conservation Commission.

F. "Licensee" shall mean Florida Power and Light Company (FPL) or Gulfstream Natural Gas System, L.L.C. [Gulfstream] (where applicable) as owners and operators of the certified facilities.

G. "Power plant" shall mean the electric power generating equipment and appurtenances to be constructed on the certified portion of the Martin site in Martin County, as generally depicted in the Application.

H. "Project" shall mean the Martin Expansion Project and all associated facilities, including: Units 3 and 4, , Combined Cycle Unit 8, the Martin Solar Energy Center, the cooling pond, gas pipeline, supplemental cooling tower, transmission lines and related facilities. The project consists of several phases. Phase I involved natural gas-fired, combined cycle Units 3 and 4 with distillate fuel oil as backup and an associated natural gas pipeline and transmission line upgrade. Phase II involves incorporation of Units 8A and 8B into combined-cycle Unit 8. Phase III involves initial development of the Martin Solar energy Center. Future phases may involve additional gas-fired combined cycle units (which include Units 5 and 6) and renewable energy facilities using solar, biomass and other energy sources. Those future phases beyond Phases III require approval in subsequent proceedings under the Act.

I. "SFWMD" shall mean the South Florida Water Management District.

J. "ISO" shall mean International Organization for Standardization, ISO 3977-1978(E) standard conditions for gas turbines = 14.7 psia, 150° C, relative humidity 60%.

K. "Facility" shall mean the certified electrical power generation facility and all associated structures, including but not limited to: combustion turbine generators, heat recovery steam generators, duct burners, steam turbine generators, selective catalytic reduction units, solar thermal arrays and heat exchangers, heat transfer fluid expansion

storage tanks, transformers, associated transmission lines, substations, fuel and water storage tanks, natural gas delivery metering station, air and water pollution control equipment, storm water control ponds and facilities, cooling towers, and related structures.

L. "DHR" shall mean the Florida Department of State, Division of Historical Resources.

M. "NPDES permit" shall mean the federal National Pollutant Discharge Permit System permit issued in accordance with the federal Clean Water Act.

N. "PSD permit" shall mean the federal Prevention of Significant Deterioration air emissions permit issued in accordance with the federal Clean Air Act.

O. "Title V permit" shall mean the federal permit issued in accordance with Title V of the federal Clean Air Act.

P. "The SE District Office" shall mean the Department's Southeast District Office located at 400 North Congress Avenue, West Palm Beach, FL 33401, (561) 681-6600.

IV. AIR

The construction and operation of Martin Expansion Project shall be in accordance with all applicable provisions of Chapters 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. In addition to the foregoing, the project shall comply with all applicable provisions and requirements of PSD Permits FL-286 and FL 327, Air Permit No. 0850001-016-AC incorporated by reference herein as part of this Certification attached as Appendix 1 and DEP Permit 0850001-017-AV incorporated by reference herein as part of this Certification attached as Appendix 2 as may be subsequently modified, amended or renewed. Such provisions shall be fully enforceable as conditions of this certification. Any violation of such provisions shall be a violation of these Conditions of Certification.

V. SURFACE WATER DISCHARGES

Discharges into surface waters of the state during construction and operation of the project shall be in accordance with applicable provisions of 62-4, 62-160, 62-302, 62-601, 62-650, and 62-660, F.A.C., DEP (NPDES) Permit No. FL0030988-007-IW1S, attached as Appendix 3, as well as any subsequent revisions, renewals, amendments or modifications, and the following Conditions of Certification:

A. Exemptions

Pursuant to Rule 62-520(8), F.A.C., the existing Martin cooling pond is exempt from secondary drinking water standards for chloride, sulfate and total dissolved solids.

B. Ground Water

Within six months of issuance of the certification of the applicable phase (Phase I), the Licensee shall develop and implement a new ground water monitoring plan: a) acceptable to DEP; b) detailed according to the criteria of Rule 62-522.600, F.A.C., and c) specifically addressing seepage from the cooling pond, the area expected to be affected by seepage. A zone of discharge is granted within the applicant's property.

VI. SOUTH FLORIDA WATER MANAGEMENT DISTRICT

A. Legal/Administrative Conditions

1. General

a. Minimum Standards.

This Certification is based on the Licensee's submitted information to SFWMD which reasonably demonstrates that adverse off site water resource related impacts will not be caused by the authorized activities. The plans, drawings and design specifications submitted by the Licensee shall be considered the minimum standards for compliance.

b. Compliance Requirements.

This project must be constructed, operated and maintained in compliance with and meet all nonprocedural requirements set forth in Chapter 373, F.S., and Chapters 40E-2 (Consumptive Use), 40E-3 (Water Wells), 40E-4 (Environmental Resource Permits), 40E-6 (Utilization of District Works), and 40E-20 (General Water Use Permits), F.A.C.

c. Off site Impacts.

It is the responsibility of the Licensee to ensure that adverse off site water resource related impacts do not occur during the construction, operation, and maintenance of the project.

d. Liability.

The Licensee shall hold and save SFWMD harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, operation, maintenance and/or use of any facility authorized by this Certification, to the extent allowed under Florida law.

e. Construction, Operation, and Maintenance Responsibilities.

The Licensee shall be responsible for the construction, operation, and maintenance of all facilities installed for the proposed project. All structures on SFWMD works or lands

constructed by the Licensee shall remain the property of the Licensee, who shall be solely responsible for ensuring that such structures and other uses remain in a safe condition and comply with all applicable federal, state, and local safety standards. SFWMD assumes no duty with regard to ensuring that such uses are so maintained and assumes no liability with regard to injuries caused others by any such failure. SFWMD further assumes no duty to ensure that the permitted use complies with the safety standards of other governmental entities. SFWMD is not responsible for any damages to installations located within its rights-of-way. The Licensee shall be responsible for the repair and/or replacement of existing facilities located within the SFWMD's rights-of-way. Canal right-of-way disturbed during construction, installation or maintenance of any authorized facilities shall be restored to original or better condition.

f. Non-interference with District Operations.

Except as may be authorized by this Certification, the Licensee shall not engage in any activity regarding the authorized use which interferes with the construction, alteration, maintenance or operation of the works of SFWMD, including, but not limited to:

- (1) discharging pollutants, debris or aquatic weeds into SFWMD works;
- (2) causing erosion or shoaling within SFWMD works;
- and
- (3) planting trees or shrubs or erecting structures which limit or prohibit access by SFWMD equipment and vehicles.

The Licensee shall be responsible for any costs incurred by SFWMD resulting from any such interference.

g. Access.

SFWMD representatives shall be allowed reasonable escorted access to the power plant site, any associated linear facilities and the wetland mitigation/restoration area to inspect and observe any activities associated with the construction of the proposed project and/or the operation and/or maintenance of the on site wells, surface water withdrawal pumps, and/or surface water management system in order to determine compliance with the conditions of this Certification. The Licensee shall not refuse immediate entry or access upon reasonable notice to any SFWMD representative who requests entry for purpose of the above noted inspection and presents appropriate credentials.

h. Post Certification Information Submittals.

Information submitted to SFWMD subsequent to Certification, in compliance with the conditions of this Certification, shall be for the purpose of SFWMD determining the Licensees compliance with the Certification conditions and the non-procedural criteria contained in Chapters 40E-2, 40E-3, 40E-4, and 40E-6, F.A.C., as applicable, prior to the commencement of the subject construction, operation, and/or maintenance activity covered thereunder.

i. Post Certification Permit Modification.

Once the final Certification for a phase of the project, including the transmission line and gas pipeline, has been issued, SFWMD will require modification of the appropriate permits issued by SFWMD for any affected entities to reflect the activities authorized by the certification order.

j. Enforcement.

The SFWMD may confer with FDEP to request FDEP to take any and all lawful actions that are necessary to enforce any condition of this Certification based on the authorizing statutes and rules of the SFWMD.

k. Post Certification Construction Notifications.

At least 30 days prior to the commencement of construction of any phase of this project, the Licensee or Project Engineer shall notify SFWMD staff in the Martin/St. Lucie Service Center Environmental Resource Compliance Division (using the appropriate SFWMD form) of the actual or anticipated construction start date and the expected completion date/duration of construction. Annual construction status reports shall be submitted by the Licensee to the SFWMD Environmental Resource Compliance Division (using the appropriate SFWMD form) beginning one year after the initial construction date.

2. Processing of Informational Requests.

a. At least ninety (90) days prior to the commencement of construction of any portion of the project for which additional information must be submitted, the Licensee shall submit to SFWMD staff, for a completeness and sufficiency review, any pertinent additional information required under SFWMD's site specific standards and the conditions of Certification for that portion proposed for construction. If SFWMD staff does not issue a written request for additional information within thirty (30) days, the information will be presumed to be complete and sufficient.

b. Within sixty (60) days of the determination by SFWMD staff that the additional information is complete and sufficient, the SFWMD shall determine and notify the Licensee in writing whether the proposed activities conform to SFWMD non procedural criteria, as required by Chapters 40E-2, 40E-3, 40E-4, and 40E-6, F.A.C., and the conditions of Certification. If necessary, SFWMD shall identify what items remain to be addressed. No construction activities shall begin until SFWMD has determined either in writing, or by failure to notify the Licensee in writing, that the activities are in compliance with the applicable SFWMD criteria.

c. Since this Certification is the only form of permit required from any agency, it is understood that the Licensee and SFWMD shall strive to resolve disputes by mutual agreement.

d. If mutual agreement cannot be reached, then the matter shall be immediately referred to the Division of Administrative Hearings (DOAH) for disposition in accordance with the provisions of Chapter 120, F.S.

e. Subsequent modifications to the drawings and supporting calculations submitted to the SFWMD which may alter the quantity and/or quality of waters discharged off site shall be made pursuant to Section 403.516, F.S., and Rule 62-17.211, F.A.C. They shall also be submitted to SFWMD for a determination that the modifications are in compliance with the non-procedural provisions of Chapters 40E-2, 40E-3, 40E-4, and 40E-6, F.A.C., prior to the commencement of construction.

f. SFWMD and the Licensee may jointly agree to vary the informational requirements.

B. Water Use Conditions

1. General

a. Water Shortage Compliance.

In the event of a declared water shortage, the Licensee must comply with any water withdrawal reductions or monitoring requirements ordered by SFWMD in accordance with the Water Shortage Plan, Chapter 40E-21, F.A.C.

b. Impacts on Existing Legal Uses.

The Licensee shall mitigate any adverse impact on existing legal uses caused by the ground water withdrawals authorized by this Certification. When adverse impacts occur or are imminent, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.j of these conditions. The adverse impacts can include:

(1) A reduction in well water levels that impairs the ability of an adjacent well, including a domestic well, lawn irrigation well, or public water supply well, to produce by 10% or greater;

(2) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system that impairs the ability to produce water by 10% or greater;

(3) Saline water intrusion or induced movement of pollutants into the water supply of an adjacent water user, resulting in a significant reduction in water quality; and/or

(4) A change in water quality caused by the Licensee that results in significant impairment or loss of use of a well or water body.

c. Impacts On Existing Off Site Land Uses. The Licensee shall mitigate any adverse impacts on existing off-site land uses that are a consequence of the groundwater withdrawals authorized by this Certification. If increased withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.j of these conditions. Adverse impacts can include:

(1) A significant reduction in water levels in an adjacent water body, including impoundments, to the extent that the designed function of the water body is impaired;

(2) Land collapse or subsidence caused by a reduction in water levels; and/or

(3) Damage to crops and other types of vegetation.

d. Impacts to Natural Resources. The Licensee shall mitigate any adverse impacts to natural resources as a consequence of the groundwater withdrawals authorized by this Certification. When adverse impacts occur, or are imminent, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.j of these conditions. Adverse impacts can include:

- (1) A reduction in ground water levels that results in significant lateral movement of the fresh water/salt water interface;
- (2) A reduction in water levels that adversely impacts the hydroperiod of protected wetland environments;
- (3) A significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond;
- (4) Induced movement or induction of pollutants into the water supply resulting in a significant reduction in water quality; and/or
- (5) Harm to the natural system including damage to habitat for rare or endangered species.

e. Well System Operation. At any time, if there is an indication that the well casing, valves, or controls associated with an on site well system leak or have become inoperative, the Licensee shall be responsible for making the necessary repairs or replacement to restore the well system to an operating condition acceptable to SFWMD. Failure to make such repairs shall be cause for requiring that the well be filled and abandoned in accordance with the procedures outlined in Chapter 40E-3 (Water Wells), F.A.C.

2. Site Specific Standards Design Requirements

a. Authorized Daily Withdrawals. This Certification authorizes a maximum daily withdrawal of 0.067 MGD from the surficial aquifer for potable water demands, and a continued maximum daily withdrawal of 518.40 MGD from the St. Lucie Canal (C-44) as provided in the June 14, 1983, Revised Permit Agreement Between SFWMD and FPL to supplement evaporation, seepage and cooling losses from the on site cooling pond upon build out of Units 3 and 8. This Certification also authorizes, on an interim basis, a maximum withdrawal of 9.6 MGD from the on-site cooling pond for the processing and related industrial water demands of Units 3, 4 and 8 until such time as additional generating units are constructed and operational or the withdrawals authorized by this Certification are modified pursuant to Condition VI.B.2.e, whichever occurs first. These authorizations also include the daily applicable surface water demands of the existing Units 1 and 2.

b. Authorized Annual Withdrawals. This Certification authorizes a maximum annual withdrawal of 10.22 MGY from the surficial aquifer, and a continued maximum annual withdrawal of 26,808.50 MGY from the St. Lucie Canal (C-44) as provided in the June 14, 1983, Revised Permit Agreement Between SFWMD and FPL to supplement evaporation, seepage and cooling losses from the on site cooling pond upon buildout of Units 3, 4, 5, 6 and 8. These authorizations also include the applicable annual surface water demands of the existing Units 1 and 2. This Certification also authorizes, on an interim basis, a maximum annual withdrawal of 2,911.74 MGY from the on site cooling pond for the processing and related industrial water demands of Units 3, 4 and 8 until such time as any additional generating units are constructed and operational or the withdrawals authorized by this Certification are modified pursuant to Condition VI.B.2.e. whichever occurs first.

c. Authorized Withdrawal Facilities:

- 1 -- 8" X 100' X 50 GPM well cased to 50' withdrawing from the surficial aquifer
- 4 -- 1000 HP X 90,000 GPM surface water pumps with an intake elevation of 8.00 ft. NGVD withdrawing from the C 44 canal
- 4 -- 50 HP X 550 GPM surface water pumps with an intake elevation of 7.50 ft. NGVD withdrawing from the C-44 canal (for screen wash purposes)
- 1 -- 3 HP X 200 GPM surface water pump with an intake elevation of 7.0 ft. NGVD withdrawing from the C-44 canal (for screen wash purposes)
- 2 -- 25 HP X 1500 GPM surface water pumps withdrawing from the on site cooling pond on a temporary basis to meet processing and related industrial water demands of Units 3 and 4, consistent with Conditions V.B.2.a, b, and e
- 2 -- 100 HP X 4000 GPM surface water pumps withdrawing from the on-site cooling pond (to meet make-up water demands of Unit 8)
- 2 -- 150 HP X 4000 GPM surface water pumps with an intake elevation of 7.0 ft. NGVD withdrawing from the C-44 Canal (for emergency back-up for Unit 8).

d. Cooling Pond Maximum Elevation. In accordance with Amendment Two to the June 14, 1983, Revised Permit Agreement between SFWMD and FPL, the Licensee, is authorized to fill the cooling pond at the Martin Plant to surface water elevations of 33.67 NGVD during the period of October 16 through May 14 of each year ("dry season") and 32.83 feet NGVD during the period May 15 through October 15 of each year ("wet season"), provided that if rainfall events cause these dry and wet season water levels to be exceeded, the Licensee shall refrain from adding make-up water to the cooling pond from the St. Lucie (C-44) Canal via the 90,000 GPM intake pumps until such time as seepage and evaporative losses or flood control releases have lowered the cooling pond elevation below these levels.

e. Modification of Authorized Withdrawals. By June 13, 2003, and every ten years thereafter, unless extended by mutual agreement between the Licensee and SFWMD the Licensee shall submit to the SFWMD a report on the project's consumptive water use which contains the information required by Chapter 40E-2, F.A.C., as in effect at that time. Within 90 days after receipt of the report, SFWMD shall evaluate the information, and issue a written notification to DEP and the Licensee as to whether the maximum annual withdrawals of water for consumptive use authorized by this Certification remains in compliance with the provisions of Chapter 373, F.S., and Chapter 40E-2, F.A.C., as in effect at that time. If the notification indicates that the withdrawals are not in compliance with those provisions, it shall recommend possible alternatives for bringing the withdrawals into compliance or otherwise meeting the minimum consumptive water use needs of the certified project. If mutual agreement cannot be reached within 180 days after issuance of the written notification on whether the maximum annual withdrawals of water for consumptive use remain in compliance, then the written notification shall be immediately referred to the Division of Administrative Hearings (DOAH) for resolution in accordance with the procedural provisions of Sections 403.516(1)(c) and 120.57, F.S. (1989). In any proceeding conducted pursuant to this Condition of Certification, SFWMD shall demonstrate that the authorized water uses are no longer consistent with SFWMD's nonprocedural criteria. The Licensee shall then demonstrate its entitlement to maintaining the authorized water uses by showing that the authorized water use is

consistent with the nonprocedural criteria of SFWMD for such water uses or that a variance or other relief is warranted. The Administrative Law Judge shall submit a recommended order to the Siting Board on whether the authorized water uses should be modified. The Siting Board shall then enter a final order on the matter, which order will constitute final agency action.

3. Additional Information Requirements

a. Dewatering Operations. Prior to the commencement of construction of those portions of the project which involve dewatering activities, including any dewatering activities that may be associated with the construction of the proposed transmission line and fuel pipeline, a detailed plan for the proposed dewatering activities must be reviewed by SFWMD for a determination of compliance with the nonprocedural provisions of Chapter 40E-2, 40E-3, and 40E-4, F.A.C. The following information must be submitted:

- (1) A detailed site plan which shows the locations of the proposed dewatering areas;
- (2) The methods of dewatering operations;
- (3) The maximum depth for each dewatering operation;
- (4) The location and specifications for all proposed wells and/or pumps associated with each dewatering operation;
- (5) The discharge method, route, and location of receiving waters generated by each dewatering operation, including the measures (best management practices) to be taken to prevent water quality problems in the receiving waters;
- (6) The duration of each dewatering operation;
- (7) An analysis of the impacts of the proposed dewatering operations which indicates that no significant impacts will occur to any existing on site and/or off site legal users or wetlands and that the stability of the dike for the on site cooling pond will not be threatened. FPL may submit the existing plans that were submitted and reviewed during the site Certification application sufficiency review process, which require the installation of sheet pilings and infiltration trenches to protect the stability of the dike and the adjacent wetlands, to meet this requirement if no changes are made in the proposed dewatering activities which would impact the assumptions on which the analysis is based;
- (8) The location of any infiltration trenches; and
- (9) All plans must be signed and sealed by a State of Florida registered Professional Engineer and a state of Florida registered Professional Geologist.

b. Monthly Reporting Requirements.

(1) Both groundwater and surface water withdrawal quantities, separated by source, as authorized by this Certification for the project, shall be submitted to SFWMD on a monthly basis beginning with the month following issuance of this Certification. FPL shall also submit, on a monthly basis, end of the month cooling pond stages, monthly seepage loss, monthly evaporation loss, monthly withdrawal from the cooling pond, and the accumulated totals of each for the year.

Surface water withdrawal quantities shall be reported in millions of gallons and acre/feet.

(2) Prior to the first day of the month, the Licensee shall notify SFWMD of its projected monthly withdrawal requirements and the date of any proposed withdrawals from the St. Lucie Canal (C-44). Copies of the monthly notification shall be provided to the Director of the Operations and Control Department, the Director of the Operations Control Division, the Director of the Water Supply Department, and the Director of the Water Use Regulation Division. The notification should include the current stage elevation of the cooling reservoir. The Licensee must receive prior approval from SFWMD for any withdrawals from the St. Lucie Canal (C-44). Subject to the enforcement provisions of Condition VI.A.1.j and the water shortage compliance provisions of Condition VI.B.1.a of these conditions, the SFWMD reserves the right to limit or terminate withdrawals by the Licensee from the St. Lucie Canal (C-44) depending upon water availability at the time of notification. In addition, during periods of declared water shortage, pursuant to the provisions of Condition VI.B.1.a of these conditions, the Licensee should coordinate with the Director of the Water Use Regulation Division to project the seasonal withdrawal requirements from the St. Lucie Canal (C-44) through the end of the restriction period.

c. Existing Well Repair, Replacement, Abandonment. If, in the future, any of the existing on site wells require repair, replacement and/or abandonment as defined by Chapter 373, Part II.E, F.S., the Licensee shall submit the information described in Chapter 40E-3, F.A.C., for review and approval by SFWMD prior to initiating such activities.

d. New Well Construction. If any new wells are required to replace the existing on site wells, and the proposed well locations are different from the locations of the previously authorized wells, the Licensee shall submit to SFWMD for review and approval an evaluation of the impacts of pumpage from the proposed well locations on adjacent existing legal users, pollution sources, environmental features, the saline water interface, and water bodies.

e. Water Conservation Plan. By June 13, 2003, the Licensee shall submit a Water Conservation Plan as required by Chapter 40E-2, F.A.C., in effect at that time, for review and approval by SFWMD staff. The plan shall, at a minimum, incorporate the following components:

- (1) An audit of the amount of water needed in the Licensee's operational processes. If found to be cost effective in the audit, the following measures shall be implemented within one year of completion of the audit:
 - (a) Implementation of a leak detection and repair program;
 - (b) Implementation of a recovery/recycling or other program providing for technological, procedural or programmatic improvements to the Licensee's facilities; and
 - (c) Use of processes to decrease water consumption.

(2) Development and Implementation of an employee awareness program concerning water conservation.

C. Surface Water Management Conditions

1. General Conditions

a. Professional Engineer Certificate. The operation of any phase of the surface water management system authorized under this Certification shall not become effective until a Florida Registered Professional Engineer certifies, upon completion of each phase, that these facilities have been constructed in accordance with the design approved by the SFWMD. Within 90 days after completion of construction of the surface water management system, the Licensee or authorized agent shall submit the engineer's certification and notify SFWMD staff in the Martin/St. Lucie Service Center Environmental Resource Compliance Division that the facilities are ready for inspection and approval. As part of such notification, the Licensee or authorized agent shall submit as-built drawings of the site. The as-built drawings shall include elevations, locations, and dimensions of components of the surface water management system.

b. Impacts on Fish, Wildlife, Natural Environment Values and Water Quality. The Licensee shall prosecute the work authorized under this Certification in a manner so as to minimize any adverse impacts of the authorized works on fish, wildlife, natural environment values, and water quality. The Licensee shall institute necessary measures during the construction period, including necessary compaction of any fill materials placed around newly installed structures and/or the use of silt screens, hay bales, seeding and mulching, and/or other similar techniques, to reduce erosion, turbidity, nutrient loading and sedimentation in the receiving waters.

c. Access Roads. The Licensee shall, whenever available, utilize adjacent existing roads for access to the transmission line and gas pipeline rights-of-way for construction, operation, and/or maintenance purposes. Finger roads connecting the existing roads to the structure pads and access roads which must be constructed in areas where an existing road is not available shall be constructed in a manner which does not impede natural drainage flows and minimizes impacts to on site and adjacent wetlands.

d. Off site Discharges. Off site discharges during construction and development of any phase of this project shall be made only through the discharge facilities authorized by the final Certification for that phase. No roadway or building construction shall commence on site until completion of the permitted discharge structure and detention areas for the applicable phase of the Project. Water discharged from the project shall be through structures having a mechanism suitable for regulating upstream water stages. Stages may be subject to operating schedules satisfactory to SFWMD.

e. Discharge Structures. Discharge structures, where appropriate, shall include a baffle, skimmer, or other mechanism suitable for preventing oil, grease, or other floatable materials from discharging to and/or from retention/detention areas.

f. Correction of Water Quality Problems. The Licensee shall be responsible for the correction of any sedimentation, turbidity, erosion, shoaling and/or other water quality problems that result from the construction, operation, and/or maintenance of the works authorized under this Certification.

g. Additional Water Quality Requirements. The Licensee may be required to incorporate additional water quality treatment methods into the surface water management system if such measures are shown to be necessary pursuant to the enforcement provisions of Condition VI.A.1.j. of these conditions.

2. Site Specific Design Requirements

a. Expansion Area Allowable Discharge. The surface water management system for the proposed project facilities located within the expansion area will be designed such that peak post-development discharges from the project site do not exceed 550 cfs for the 25 year/3 day design storm.

b. Restoration/Mitigation Area Allowable Discharge. The peak post development discharge rate from the proposed northwest restoration/mitigation area shall be based on an analysis of the additional information on the Restoration Area Construction Plans (as required under Condition VI.C.3.c).

c. Eastern Perimeter Ditch Control Elevation. Pursuant to the provisions of Condition VI. A.2. of these conditions, the Licensee may be required to change the control elevation for the eastern perimeter ditch, as necessary, if significant adverse impacts are shown to occur as a result of the existing control elevation of 18' NGVD.

3. Additional Information Requirements

a. Water Table Monitoring Program. For the Unit 8 solar energy project, the Licensee shall submit, for review and approval by the SFWMD, a water table monitoring proposal based on the results of published sources of information, a site-specific geotechnical investigation, and soil profile examinations. Prior to a determination of completeness for any supplemental application for any subsequent phase beyond the Unit 8 solar energy project, the Licensee shall undertake and complete a water table monitoring program for the proposed power plant expansion area located east of the Plant Road. The proposed program shall be submitted to SFWMD for review and approval 90 days prior to the implementation of such a program. In developing the water table monitoring program, the Licensee shall incorporate monitoring well locations which encompass the entire expansion area east of the Plant Road and regularly scheduled monitoring intervals throughout at least one normal wet season.

b. Expansion Area Construction Plans. Prior to the commencement of construction of any portion of the project within the expansion area which affects the movement of waters, all construction activities for that portion of the proposed project which may obstruct, divert, control, impound or cross waters of the state must be reviewed by SFWMD for a determination of compliance with the nonprocedural requirements of Chapters 40E-2 and 40E-4, F.A.C., including the Basis

of Review For Environmental Resource Permit Applications. For all construction activities, the following information shall be submitted:

- (1) Detailed paving, grading and drainage plans, including on site and perimeter site grades, which clearly indicate how runoff will be routed and discharged in each of the four proposed subbasins for the expansion area; demonstrate that the design storm will be held on site; and verify the stage/storage assumptions;
- (2) If control elevations are revised for any portion of the proposed surface water management system, revised calculations which demonstrate compliance with the SFWMD's retention/detention criteria for both quantity and quality purposes;
- (3) If control elevations are revised for any portion of the proposed surface water management system, revised soil storage calculations;
- (4) Detailed plans of all proposed roads, parking lots and building pads which demonstrate compliance with Martin County and SFWMD flood protection criteria;
- (5) Cross sections of all proposed control structures which demonstrate compliance with SFWMD water quality and quantity criteria; and
- (6) Documentation that the proposed surface water management system for the expansion area will not adversely impact any of the 75 acres of wetlands to be preserved on site unless additional mitigation is provided by the Licensee for the wetland impacts which may result from its construction. Upon the provision of documentation that the 75 acres of wetlands will not be adversely impacted, the Licensee shall also submit a draft instrument in recordable form agreeing with the SFWMD that, if any of the 75 acres are nonetheless adversely affected, FPL shall conduct additional mitigation as directed by SFWMD, to mitigate for such adverse impacts. Upon SFWMD's approval, the Licensee shall execute and record the instrument within 90 days of receipt of SFWMD's approval.

c. Restoration Area Construction Plans. Prior to the commencement of construction and/or modification of any portion of the proposed and/or existing facilities associated with the restoration plan for the northwest mitigation/restoration area, all proposed activities must be reviewed by SFWMD for a determination of compliance with the nonprocedural requirements of Chapters 40E-2 and 40E-4, F.A.C. including the Basis of Review For Environmental Resource Permit Applications. The following information, to any extent it has not already been furnished to SFWMD, shall be provided:

- (1) Inverts, elevations and current condition of the discharge culverts along SR 710 that provide drainage for the three off site drainage basins north of SR 710 which drain through and/or around the northwest restoration/mitigation area;
- (2) Detailed descriptions of any existing drainage structures and facilities, including cross sections, elevations, dimensions and conditions, within the four drainage basins which drain through and/or around the northwest restoration/mitigation area which support the Licensee's assumptions and analysis of the basins;

(3) A representative sampling of existing finished floor elevations which demonstrates that the existing dwelling units will not be adversely impacted by the proposed improvements within the northwest restoration/mitigation area;

(4) Detailed construction plans, including supporting assumptions and calculations, for the proposed control structures, culverts, berms, swales, ditches, etc., in the northwest;

(5) Documentation that demonstrates that the proposed sump pump discharges into the northwest restoration/mitigation area will not cause erosion impacts;

(6) A detailed field study, that may include additional topography, which documents the need for the proposed ditch connection from Structure C to Black Bottom Slough; and

(7) Documentation that the proposed flows from Black Bottom Slough into L-65 will not exceed preexisting flows into L-65.

d. Transmission Line and Fuel Pipeline Construction Plans for Phase I. Prior to the commencement of construction of any portion of the proposed transmission line or fuel pipeline, all construction activities for that portion of the transmission line or fuel pipeline which may obstruct, divert, control, impound or cross waters of the state either temporarily or permanently, must be reviewed by SFWMD for a determination of compliance with the nonprocedural requirements of Chapters 40E-2 and 40E-4, F.A.C., including the Basis of Review For Environmental Resource Permit Applications. "Construction activities" in this situation shall include the placement of structure pads, access/maintenance roads, culverts, and/or fill materials excavation activities, and related activities. For all such construction activities, the following information shall be submitted:

(1) A centerline profile of existing topographic features along the proposed access/maintenance road(s) and/or pipeline excavation route;

(2) A preliminary design of the proposed access/maintenance and finger road(s) and/or pipeline excavation route with elevations marked;

(3) A typical cross section of the proposed access/maintenance and finger roads and/or pipeline excavation route;

(4) A cross section of each stream or creek at the points to be crossed by the access/maintenance and finger road(s), pipeline excavation route, and/or other construction;

(5) Specifications showing the location of each transmission tower, finger and access/maintenance road, culvert, pipeline section, and/or other related structure or facility to be constructed, including all areas to be filled or excavated,

(6) Specifications, including supporting assumptions and calculations, showing the type and size of water control structures (pipe, culvert, equalizer, etc.) to be used, with proposed flowline elevations marked, drainage areas identified and design capacity verified;

- (7) A cross section of all proposed excavation areas showing the proposed depth of excavation;
- (8) Calculations and the supporting documentation which demonstrate compliance with all applicable criteria, particularly as they relate to allowable discharge;
- (9) Identification of wet season water table elevations for each basin in which facilities will be located;
- (10) Calculations and supporting documentation which demonstrate that the proposed construction activities associated with the transmission line and/or fuel pipeline will not have an adverse water quantity and/or water quality impact on existing and/or permitted surface water management systems; and
- (11) If construction of the proposed transmission line and/or fuel pipeline contributes to the necessity for future modifications to adjacent/existing roads, water quality treatment for the requested modifications must be addressed in the surface water management system design for the transmission line and/or fuel pipeline.

e. Surface Water Quality Sampling and Monitoring. Surface water quality sampling and monitoring data shall be collected and analyzed in accordance with applicable DEP and EPA criteria.

f. Hazardous Materials Management. Prior to the commencement of any phase of this Project, the Licensee shall submit for review by SFWMD for consistency with the requirements of Chapter 40E-4, F.A.C., a revised Comprehensive Oil, Hazardous Materials, and Hazardous Waste Management Program Plan for the Martin Expansion Project. The plan shall provide an adequate level of detail for early warning and detection of hazardous materials within the shallow groundwater.

D. Environmental Conditions

1. General

a. Wetland Avoidance. The Licensee shall avoid impacting wetlands within the power plant site, transmission line and fuel pipeline corridors wherever practicable. Where necessary and feasible the location and span between power poles and the location of the pipeline within the right of way shall be varied to eliminate or reduce wetland impacts.

b. Fill Materials. Except as authorized by this Certification and other permits issued for this project, no fill materials may be obtained from excavated wetlands within the project site, unless in accordance with a mitigation plan submitted in compliance with the conditions of this Certification.

c. Determination of Compliance with SFWMD Wetland Mitigation Requirements. Based on the wetland mitigation criteria of Chapter 40E-4, including the Basis of Review for Environmental Resource Permit Applications, SFWMD has determined that the Licensee's proposed restoration, preservation and enhancement program (Program), if its objectives are successfully achieved, would result in mitigation beyond that required by SFWMD's criteria. This extra mitigation may

be employed to compensate, as necessary, for wetland impacts associated with the Project's associated linear facilities, pursuant to Condition VI.D.2.c; for additional wetland impacts of the Project; or to provide additional compensation to achieve the Program's success, as identified in Conditions VI.D.2.b.(8). and VI.D.2.c.(6).

d. Additional Wetlands Mitigation. The Licensee may be required to provide additional mitigation and/or other measures if wetland monitoring and/or other information demonstrates that adverse impacts to protected, restored and/or mitigated wetlands have occurred as a result of project-related activities, including the proposed transmission line and fuel pipeline.

2. Additional Information Requirements

a. Expansion Area Wetlands Protection. Prior to the commencement of construction of any facilities located adjacent to the wetlands identified for preservation in the expansion area, the Licensee shall stake and rope off the protected wetland areas to prevent encroachment during construction. Staking shall remain in place until all adjacent construction activities are completed. Verification by SFWMD staff shall be required prior to commencement and upon completion of any construction activities.

b. Northwest Restoration/Mitigation Area Plan. Prior to the commencement of construction of any portion of the restoration/mitigation areas for the proposed expansion project, final details of the proposed restoration/mitigation plan must be submitted to SFWMD for a determination of compliance with the non procedural requirements of Chapters 40E-2 and 40E-4, F.A.C., including the Basis of Review for Environmental Resource Permit Applications. This plan shall include the following:

1) Specific acreage figures and locations of all wetlands to be preserved, created and restored;

(2) Identification of all proposed areas of inundation;

(3) Identification of proposed control elevations;

(4) Documentation that the proposed restoration/mitigation activities will not adversely impact adjacent land owners;

(5) A discussion of any additional mitigation activities to be undertaken, including the location of all mitigation areas and a description of the manner in which these areas will be created restored or otherwise enhanced;

(6) A timetable of accomplishing the proposed mitigation activities prior to, or concurrent with, the construction of Phase I of this Project;

(7) Documentation, including a draft instrument in recordable form that, for each phase of the Project, an appropriate portion of the northwest mitigation parcel commensurate with the wetlands to be impacted by that Project phase will be preserved prior to commencement of construction of that phase such that it will be managed in a manner consistent with its proposed use as a conservation area; and

(8) A detailed monitoring and maintenance program designed to ensure the success of the restoration, enhancement and preservation program proposed by the Licensee. The success of this Program shall be based upon an assessment of the Program's measured progress toward achieving a restored,

functional hydrologic regime the improvement of hydric soils within appropriate areas and the natural, beneficial changes in vegetation composition, diversity, growth rates and canopy characteristics within the areas this Program is to be undertaken. For any created wetland excluding any designated woodstork feeding areas, the measure of success shall be predicated on a guaranteed survival or coverage of 80% of the appropriate wetland vegetation. At a minimum, the monitoring plan shall be conducted for a period of 5 years, with reports submitted to SFWMD annually, and all monitoring stations identified on a plan view. This monitoring may be continued on a year-to-year basis depending on the extent to which the program has successfully achieved its objectives. However, SFWMD may at any time determine that such monitoring may be discontinued upon success of the program being demonstrated by the Licensee.

c. Transmission Line and Fuel Pipeline Mitigation Plan. Prior to the commencement of construction of any portion of the proposed transmission line and fuel pipeline, a mitigation plan to offset any wetland impacts associated with that portion of the transmission line or pipeline must be submitted to the SFWMD for a determination of compliance with the non-procedural requirements of Chapters 40E-2, 40E-4 and 40E-6, F.A.C., including the Basis of Review for Environmental Resource Permit Applications. This plan shall include the following:

(1) Specific acreage figures and locations of all wetlands, both within the transmission line or fuel pipeline right of way and adjacent to it, which would be impacted by the construction activities, including an explanation of why no feasible alternative exists;

(2) Documentation that none of the proposed excavation activities will adversely impact off site wetlands;

(3) A discussion of the proposed mitigation activities to be undertaken, including the location of all mitigation areas and a description of the manner in which these areas will be created, restored or otherwise enhanced;

(4) If such mitigation shall occur within the northwest restoration/mitigation area, documentation that sufficient wetland mitigation areas within the restoration/mitigation area have been legally reserved to compensate for the proposed wetland impacts;

(5) A timetable for accomplishing the proposed mitigation activities concurrently with the construction of the transmission line or fuel pipeline and any associated wetland impacts, unless documentation for doing otherwise is submitted and approved in writing by SFWMD prior to the commencement of construction; and

(6) A detailed monitoring and maintenance program designed to ensure the success of the restoration, enhancement and preservation program proposed by the Licensee. The success of this program shall be based upon an assessment of the Program's measured progress toward achieving a restored, functional hydrologic regime; the improvement of hydric soils within appropriate areas; and the natural, beneficial changes in vegetation composition, diversity, growth rates and canopy characteristics within the areas this Program is to be undertaken. For any created wetland excluding any designated woodstork feeding areas, the measure of success shall be predicated on guaranteed survival or coverage of 80% of the appropriate wetland vegetation. At a minimum, the monitoring plan shall be conducted for a period of 5 years, with reports submitted to SFWMD annually, and all monitoring

stations identified on a plan view. This monitoring may be continued on a year-to-year basis depending on the extent to which the program has successfully achieved its objectives. However, SFWMD may at any time determine that such monitoring may be discontinued upon success of the program being demonstrated by the Licensee.

d. Expansion Area Secondary Wetland Impacts. Prior to commencement of construction of any phase located adjacent to wetlands identified for preservation, the Licensee shall submit documentation to the SFWMD, pursuant to Chapter 40E-4, F.A.C., and the Basis of Review For Environmental Resource Permit Applications, demonstrating that no adverse secondary wetland impacts will occur. If the SFWMD determines that secondary impacts will occur to wetland functions or listed wildlife species, then the Licensee shall conduct additional mitigation, as directed by the SFWMD, to mitigate such adverse impacts. Upon SFWMD's approval, the Licensee shall execute and record the instrument within 90 days of receipt of the SFWMD's approval.

E. SFWMD Lands

1. Future Modifications.

If, in the future, the Licensee proposes modifications and/or additions to any existing, permitted power plant, transmission line and/or fuel pipeline facilities that are currently located within SFWMD's right-of-way that were not anticipated in the Site Certification Application submitted, complete drawings showing the proposed and/or modified facility(ies) shall be submitted for review by SFWMD for a determination of compliance with Chapter 40E-6, F.A.C., prior to the commencement of construction of any facilities which will cross over, on, under, or otherwise use SFWMD's right-of-way. These drawings shall depict the proposed use in both plan and profile views and shall show, as a minimum:

- a. For aerial electrical transmission/ distribution crossings:
 - (1) The canal right-of-way lines;
 - (2) The top of the canal bank and its elevation;
 - (3) The centerline of the levee and its elevation;
 - (4) The canal maintenance berm and its elevation at its highest point;
 - (5) The location of any poles, towers, access roads, pipelines, etc., located within SFWMD's right-of-way;
 - (6) The location of any anchors, downguys or spanguys within SFWMD's right-of-way;
 - (7) The elevation of the lowest line, wire, or cable crossing over SFWMD's right-of-way, given at the lowest point of sag in the span within SFWMD's right-of-way;
 - (8) The location and elevation of any buried facilities; and
 - (9) The location of the facilities in relation to a section line, major road, or other prominent well-known landmark by which the facilities have been located in the field.

b. For bridges and other pile supported crossings and arch, free span and subaqueous crossings (such as gas, fuel oil, water, sewage, communications lines, etc.):

- (1) The canal right-of-way lines;
- (2) The top of the canal bank and its elevation;
- (3) The width and elevation of any berms or levees;
- (4) The existing cross section of the canal taken at the centerline of the point of crossing plus one cross section each taken 50' upstream and 50' downstream of the faces of the proposed crossing. The cross sections will be taken at 10' intervals from top of bank to top of bank and shall be plotted on standard 10 x 10 cross section paper to the same horizontal and vertical scale using NGVD datum. If applicable, the ultimate design section for the canal shall also be plotted on the cross sections submitted;

- (5) If applicable the locations at which the crossing shall enter and emerge from the banks or berms;

- (6) If applicable, the pile spacing measured center to center for any and all approach spans and measured face to face for the pile bents of the center span;

- (7) If applicable the burial depth below the bank, berm and bottom elevation;

- (8) If applicable the elevation of the bottom and top of any pipe, conduit or casing;

- (9) If applicable, the wall thickness or "schedule" of the pipe;

- (10) If applicable, any appurtenances such as fences, guardrails, security enclosures, paving, meters, valves, blow off lines, cathodic protection systems (whether buried or exposed), etc.;

- (11) The location of the proposed facilities in relation to a section line, major road or other prominent well-known landmark by which the facilities have been located in the field;

- (12) If applicable, the locations of any existing facilities located within SFWMD's right-of-way at the proposed project site; and

- (13) If applicable, the manner in which SFWMD will be provided access to bridge approaches, including drop curbing, reinforced sidewalk sections, guardrail openings, stabilized berm ramps having a minimum top width of 15 feet with a maximum slope of 1 vertical to 10 horizontal.

c. For general short term construction activities on SFWMD right-of-way or where the use of the right of way is proposed for short or long term access to the site:

- (1) If applicable, any work areas, spoil disposal or drying areas, materials storage areas, temporary construction or office trailer sites;

- (2) If applicable, any temporary or permanent ingress/egress routes to the work site; and

- (3) The location of the proposed facilities in relation to a section line, major road or other prominent well-known landmark by which the facilities have been located in the field.

VII. CONTROL MEASURES DURING CONSTRUCTION

A. *Sanitary Wastes*

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the Martin County Health Department.

B. *Environmental Control Program*

The Licensee shall establish an environmental control program under the supervision of a qualified person to assure that all construction activities conform to good environmental practices and the applicable conditions of certification. A written plan for controlling pollution during construction shall be submitted to DEP within sixty days of issuance of the Certification for the applicable phase. The plan shall identify and describe all pollutants and wastes generated during construction and the methods for control, treatment and disposal. The Licensee shall notify DEP's Southeast District Office by telephone within 24 hours, if possible, if unexpected harmful effects or evidence of irreversible environmental damage are detected by it during construction, shall immediately report in writing to DEP, and shall within two weeks provide an analysis of the problem and a plan to eliminate or significantly reduce the harmful effects or damage and a plan to prevent reoccurrence.

C. *Construction Dewatering Effluent*

Should the Licensee's dewatering operation create shoaling in adjacent water bodies, the Licensee is responsible for removing such shoaling. All offsite discharges resulting from dewatering activities must be in compliance with water quality standards required by DEP Chapters 62-4 and 62-302, F.A.C., or such standards as issued through a variance by DEP.

VIII. SAFETY

The overall design, layout, and operation of the facilities shall be such as to minimize hazards to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation.

IX. SCREENING

The Licensee shall provide screening of the site to the extent feasible through the use of aesthetically acceptable structures, vegetated earthen walls and/or existing or planted vegetation.

X. TOXIC, DELETERIOUS OR HAZARDOUS MATERIALS

The spill of any toxic, deleterious, or hazardous materials shall be reported in the manner specified by Condition XIII, Noncompliance Notification.

XI. SOLID WASTE STORAGE AND DISPOSAL

Solid waste produced by the operation of the Martin Expansion Project shall be disposed of on site or in a permitted disposal facility.

XII. CHANGE IN DISCHARGE

All discharges or emissions authorized herein to the Martin Expansion Project shall be consistent with the terms and conditions of these Conditions. The discharge of any pollutant not identified in the application or any discharge more frequent than, or at a level in excess of that authorized herein shall constitute a violation of these Conditions. Any anticipated facility expansion, production increase, or process modification which will result in new, different or increased discharges or expansion in steam generation capacity will require a submission of new or supplemental application to DEP's Siting Coordination Office pursuant to Chapter 403, F.S.

XIII. NONCOMPLIANCE NOTIFICATION

If, for any reason, the Licensee does not comply with or will be unable to comply with any limitation specified in these Conditions, the Licensee shall notify the District Manager of DEP's Southeast District Office by during the working day that said noncompliance occurs. After normal business hours, the Licensee shall report any condition that poses a public health threat to the State Warning Point at telephone number (850) 413-9911 or (850) 413-9912. The Licensee shall confirm this situation to the DEP District Office in writing within seventy-two (72) hours of becoming aware of such conditions and shall supply the following information:

- A. A description of the discharge and cause of noncompliance; and
- B. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying event.

XIV. FACILITIES OPERATION

A. The Licensee shall at all times properly operate and maintain the facility and related appurtenances, and systems of treatment and control that are installed and used to achieve compliance with the conditions of these Conditions, and are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the approval and when required by Department rules.

B. In the event of a prolonged [thirty (30) days or more] equipment malfunction or shutdown of pollution control equipment, facility operation may be allowed to resume and continue to take place under an appropriate Department order, provided that the Licensee demonstrates that such operation will be in compliance with all applicable ambient air quality standards and PSD increments, water quality standards and rules, solid waste rules, domestic wastewater rules and industrial wastewater rules. During such malfunction or shutdown, the operation of the facility shall comply with all other requirements of these Conditions and all applicable state and federal emission and effluent standards not affected by the malfunction or shutdown.

C. Records Maintained at the Facility

1. These Conditions of Certification or a copy thereof shall be kept at the work site of the approved activity.

2. The Licensee shall hold at the facility, or other location designated by this approval, records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation required by this approval, copies of all reports required by this approval, and records of all data used to complete the application for this approval. These materials shall be retained at least three (3) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule. The Licensee shall provide copies of these records to the Department upon request. If the Licensee becomes aware of relevant facts that were not submitted or were incorrect in any report to the Department, such facts or information shall be promptly submitted or corrected.

D. Toxic, Deleterious or Hazardous Materials

1. The Licensee shall not discharge to surface waters wastes which are acutely toxic, or present in concentrations which are carcinogenic, mutagenic, or teratogenic to human beings or to significant locally occurring wildlife or aquatic species. The Licensee shall not discharge to ground waters wastes in concentrations which, alone or in combination with other substances, or components of discharges (whether thermal or non-thermal) are carcinogenic, mutagenic, teratogenic, or toxic to human beings (unless specific criteria are established for such components in Section 62-

520.420, F.A.C.) or are acutely toxic to indigenous species of significance to the aquatic community within surface waters affected by the ground water at the point of contact with surface waters.

2. The Licensee shall report all spills of materials having potential to significantly pollute surface or ground waters and which are not confined to a building or similar containment structure, by telephone immediately after discovery of such spill. The Licensee shall submit a written report within forty-eight hours, excluding weekends, from the original notification. The telephone report shall be submitted by calling the DEP District Office Industrial Wastewater Compliance/Enforcement Section. After normal business hours, the Licensee shall contact the State Warning Point by calling (850) 413-9911 or (850) 413-9912. The written report shall include, but not be limited to, a detailed description of how the spill occurred, the name and chemical make-up (include any MSDS sheets) of the substance, the amount spilled, the time and date of the spill, the name and title of the person who first reported the spill, the size and extent of the spill and surface types (impervious, ground, water bodies, etc.) it impacted, the cleanup procedures used and status of completion, and include a map or aerial photograph showing the extent and paths of the material flow. Any deviation from this requirement must receive prior approval from the Department.

E. Laboratories And Quality Assurance

1. The Licensee shall ensure that all laboratory analytical data submitted to the Department, as required by this Certification, are from a laboratory which has a currently valid and Department approved Comprehensive Quality Assurance Plan (CompQAP) or a CompQAP pending approval for all parameters being reported, as required by Chapter 62-160, F.A.C.

2. The Licensee shall ensure that all samples required pursuant to these Conditions are taken by an appropriately trained technician following EPA and Department approved sampling procedures and chain-of-custody requirements in accordance with Rule 62-160, F.A.C. All chain-of-custody records shall be retained on-site for at least three (3) years and made available to the Department immediately upon request.

3. Records of monitoring information shall include:

- a. the date, exact place, and time of sampling or measurements;
- b. the person responsible for performing the sampling or measurements;
- c. the dates analyses were performed;
- d. the person responsible for performing the analyses;
- e. the analytical techniques or methods used; and,
- f. the results of such analyses.

XV. ADVERSE IMPACT

The Licensee shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in these Conditions, including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying event.

XVI. RIGHT OF ENTRY

The Licensee shall allow DEP's and SFWMD's authorized representatives, upon the presentation of credentials:

A. To enter upon the Licensee 's premises or, during business hours, to enter the Licensee 's premises in which records are required to be kept under the terms and conditions of this certification

B. To have access to and to make copies of all records required to be kept under the conditions of this certification;

C. To sample or monitor any substances or parameters at any location necessary to assure compliance with these Conditions or Department rules.

XVII. REVOCATION OR SUSPENSION

This certification may be suspended or revoked pursuant to Section 403.512, F.S., or for violations of any condition of certification. This approval is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this approval may constitute grounds for revocation and enforcement action by the Department.

XVIII. CIVIL AND CRIMINAL LIABILITY

A. This certification does not relieve the Licensee from civil or criminal responsibility or liability for noncompliance with any conditions of this certification, applicable rules or regulation of DEP, or Chapter 403, F.S., or regulations thereunder.

B. This certification does not relieve the Licensee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the Licensee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

C. As provided in Subsections 403.087(7), 403.511, and 403.722(5), F.S., the issuance of this certification does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This approval is not a waiver of any other Department approval that may be required for other aspects of the total project under federally delegated programs.

D. Subject to Section 403.511, F.S., this certification shall not preclude the institution of any legal action or relieve the Licensee from any responsibilities or penalties established pursuant to any other state statute or regulations.

XIX. PROPERTY RIGHTS

The issuance of this certification does not, unless noted otherwise, convey any property rights in either real or personal property, tangible or intangible, nor any exclusive privilege, nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. The Licensee shall obtain title, lease or right of use to any sovereign submerged lands occupied by the plant, transmission line structures, or appurtenant facilities from the State of Florida.

XX. SEVERABILITY

The provisions of this certification are severable, and, if any provision of this certification or the application of any provision of this certification to any circumstance is held invalid the application of such provision to other circumstances and the remainder of the certification shall not be affected thereby.

XXI. CERTIFIED SITE

The site of the certified power plant project is generally depicted in the application. The sites of directly associated transmission lines and natural gas pipeline corridors for which certification is granted are generally depicted in the application. Except where noted otherwise, ROWS of linear facilities will be established in the post certification information submittal and review process in accordance with the conditions of certification.

XXII. REVIEW OF SITE CERTIFICATION

The certification shall be final unless revised, revoked, or suspended pursuant to law. At least every five years from the date of issuance of certification or any National Pollutant Discharge Elimination System permit for the plant, DEP shall review all monitoring data, including groundwater quality monitoring data, that has been submitted to it or its agent(s) during the preceding five year period for the purpose of determining the extent of the Licensee's compliance with the conditions of this certification and the

environmental impact of this facility. DEP shall submit the results of its review and recommendations to the Licensee. Such review will be repeated at least every five years thereafter.

XXIII. MODIFICATION OF CONDITIONS

The conditions of this certification may be modified in the following manner:

A. The Licensee shall comply with rules, adopted by the Department subsequent to the issuance of the certification, which prescribe new or stricter criteria to the extent that the rules are applicable to electric power plants. Except where express variances, exceptions, exemptions, or other relief have been granted, subsequently adopted rules which prescribe new or stricter criteria shall operate as automatic modifications to the certification.

B. The Licensee may choose to operate in compliance with any rule subsequently adopted by the Department which prescribes criteria more lenient than the criteria required by the terms and conditions in the certification which are not site specific. Should the Licensee choose to do so, it must notify the Department to do so in writing at least 15 days prior to such operation.

C. The Siting Board pursuant to Section 403.516(1), F.S., hereby delegates to the Secretary of DEP the authority to modify, upon application by the Licensee and after notice and opportunity for hearing, any conditions pertaining to monitoring or sampling and conditions of Certification pertaining to consumptive use of water, monitoring, sampling, specification of control equipment, related time schedules, effluent or emission standards or limitations, groundwater, mixing zones, zones of discharge, leachate control programs, railroad spur, transmission lines, access roads or pipeline construction, source of treated effluent cooling water, mitigation, transfer or assignment of the Certification or related federally delegated permits, or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes.

D. This certification shall be automatically modified to conform to any subsequent amendments, modifications, or renewals made by DEP under a federally delegated or approved program to any separately issued Prevention of Significant Deterioration (PSD) permit, Title V Air Permit, or National Pollutant Discharge Elimination (NPDES) permit for the certified facility. FPL shall send each party to the original certification proceedings (at the party's last known address as shown in the record of such proceeding) notice of requests submitted by FPL for modifications or renewals of the above listed permits if the request involves a relief mechanism (e.g., mixing zone, variance, etc.) from state standards, a relaxation of conditions included in the permit due to state permitting requirements, or the inclusion of less restrictive air emission limitations in the air permits. DEP shall notify all parties to the certification

proceeding of any intent to modify conditions under this section prior to taking final agency action.

E. All other modifications shall be made in accordance with Section 403.516 F.S.

F. Replacement of any portion of the gas pipeline, transmission lines, or access roads constructed under these Conditions necessitated by emergency conditions shall not be considered a modification. A verbal report of any such emergency shall be made to DEP as soon as possible. Within 14 calendar days after correction of an emergency which would require the Licensee to perform an activity not in accordance with the conditions of certification, a report to the DEP shall be made outlining the details of the emergency and the steps taken for its temporary relief. The report shall be a written description of all of the work performed and shall set forth any pollution control measures or mitigative measures which were utilized or are being utilized to prevent pollution of waters, harm to sensitive areas, or alteration of archaeological or historical resources.

XXIV. FLOOD CONTROL PROTECTION

The plant and associated facilities shall be constructed in such a manner as to comply with the Martin County flood protection requirements, either by flood proofing or by raising the elevation of the facilities above the 100 year flood level.

XXV. EFFECT OF CERTIFICATION

Certification and conditions of certification are predicated upon design and performance criteria indicated in the application and explained at the certification hearing. Thus, conformance to those criteria, unless specifically amended or modified, is binding upon the applicant in the preparation, construction, and maintenance of the certified project. In those instances where a conflict occurs between the application's design criteria and the conditions of certification, the conditions shall prevail.

XXVI. NOISE

To mitigate the effects of noise produced by the steam blowout of steam boiler tubes, the Licensee shall conduct public awareness campaigns prior to such activities to forewarn the public of the estimated time and duration of the noise.

XXVII. ENFORCEMENT

A. The Secretary of DEP may take any and all lawful actions as he or she deems appropriate to enforce any condition of this certification.

B. SFWMD may take any and all lawful actions to enforce any condition of this certification that is based on the rules of that agency. Prior to initiating such action the agency head shall notify the Secretary of DEP of that agency's proposed action.

XXVIII. ENDANGERED AND THREATENED SPECIES

A. Prior to clearing and construction activities on site including those related to the Solar Energy Farm, the Licensee shall complete species-specific surveys relative to the following species;

Common Name	Scientific Name	Status*
Gopher frog	<i>Rana capito</i>	SSC
Gopher tortoise	<i>Gopherus polyphemus</i>	ST
Eastern indigo snake	<i>Drymarchon corais couperi</i>	ST; FT
Limpkin	<i>Aramus guarauna</i>	SSC
Snowy egret	<i>Egretta thula</i>	SSC
White ibis	<i>Eudocimus albus</i>	SSC
Florida burrowing owl	<i>Athene cunicularia floridana</i>	SSC
Audubon's crested caracara	<i>Polyborus plancus audubonii</i>	ST;FT
Florida sandhill crane	<i>Grus canadensis partensis</i>	ST
Wood stork	<i>Mycteria americana</i>	SE;FE
Sherman's fox squirrel	<i>Sciurus niger shermani</i>	SSC

* SSC – Species of Special Concern; ST – State Threatened; SE- State Endangered; FT – Federally Threatened; FE – Federally Endangered

1. Federal surveying and permitting protocols will apply to the Eastern indigo snake.

2. FWC's permitting guidelines for the gopher tortoise may be downloaded from http://myfwc.com/permits/Protected-Wildlife/policy/tortoise_relocation_guidelines.pdf

3. Surveys, for the other species listed shall be conducted in the nesting/breeding season immediately preceding all clearing or construction activities for each potentially effected species at appropriate locations. In the case of the gopher frog, as an alternative, the applicant may follow those procedures that the FWC finds acceptable for this species if gopher tortoises are observed onsite.

4. If impacts to these species cannot be avoided, then the Licensee must contact the FWC and obtain all required permits before taking any action that might result in an impact to those species.

5. The state's lists of protected wildlife species are found in Chapter 68A-27, F.A.C.

6. Available survey protocols may be downloaded from the Fish and Wildlife Research Institute webpage (<http://research.myfwc.com/publications/>) or available from FWC.

7. State of Florida surveying and permitting conditions apply to the Bald Eagle. The Bald Eagle management plan can be reviewed at: http://myfwc.com/imperiledspecies/plans/Eagle_Plan_April_2008.pdf

XXVIII. DESIGN AND PERFORMANCE CRITERIA

The certified units at the certified power plant site may be operated at up to 115% of the maximum electrical output at ISO conditions projected from design information without the need for modifying these conditions. Treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this certification are not to be bypassed without prior DEP approval. Moreover, the Licensee shall take all reasonable steps to minimize any adverse impacts resulting from noncompliance with any limitation specified in these Conditions, including but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying event.

XXIX. COMPLIANCE

Except as otherwise provided herein and in the certification order, and subject to Section 403.511(5), F.S., construction, maintenance, and operation of the permitted facility shall comply with the applicable nonprocedural rules of all agencies, unless a variance or waiver was obtained as part of the certification process.

XXX. ROW DELINEATION AND COMPLIANCE VERIFICATION

At least 90 days prior to commencement of new transmission line or pipeline construction, three copies of blue line reproductions of aerial photographs of at least 1:400 scale shall be submitted to DEP's Southeast District Office and one copy to SFWMD delineating the ROW routes selected, boundaries, preliminary pole and pad locations, and access roads. The Licensee shall notify all parties of such filing. These photographs shall be submitted prior to commencement of construction of the various segments of the linear facility; it is recommended that this information be submitted in segments rather than waiting until the entire ROW is acquired. DEP, SFWMD, and any other party who requests to do so shall have 30 days from receipt of notice to review the photographs and to call any apparent conflicts with the requirements of the conditions of certification to the Licensee's attention. However, this paragraph shall not operate to avoid the need for post certification submittals and compliance reviews otherwise required by the conditions of certification.

If DEP or any substantially affected party has reason to believe that the construction of the linear facility and access roads within the Licensee's designated ROW cannot be accomplished in compliance with the conditions of certification, the Licensee shall be so notified in writing. Failure of such a notice to be served on Licensee within 30 days from the notice of filing of the various segments in the aerial photographs with DEP constitutes acknowledgment that construction of the linear facility and access roads can be accomplished in compliance with the conditions of certification within the designated ROW or the various segments of ROW submitted for review.

The acquisition of a particular ROW or the expenditure of funds toward acquisition of a particular ROW prior to post certification review pursuant to these conditions will be at the Licensee's risk, and no party will be estopped by such acquisition to seek disapproval of the linear facility or access roads within the designated ROW in accordance with these conditions of certification.

XXXI. DISPUTE RESOLUTION

If a situation arises in which mutual agreement cannot be reached between the Licensee and an agency exercising its regulatory jurisdiction, then the matter shall be immediately referred to the Division of Administrative Hearings (DOAH) for disposition in accordance with the provisions of Chapter 120, F.S. A hearing under Section 120.57, F.S., shall be held within 30 days after its referral to DOAH. All exceptions to any order issued by the Administrative Law Judge shall be filed with the Governor and Cabinet within 10 days of the issuance of such order. The Governor and Cabinet shall issue a decision within 60 days of the filing of the exceptions.

XXXII. POST-CERTIFICATION SUBMITTALS

Conditions of certification which provide for the post certification submittal of information to agencies by the Licensee are intended solely to allow the agencies to monitor the effects arising from the Project and the location of the natural gas pipeline and transmission line rights-of-way (ROWs) and the construction and maintenance of the permitted activities to thereby assure continued compliance with state air and water quality requirements, other agency nonprocedural rules and standards, and the conditions of certification, without any further government action.

XXXIII. TRANSMISSION AND PIPELINE ROWs

A. Regulatory Approval (Phase II)

1. Unless expressly exempt by law or rule, it shall be unlawful for any person to construct or alter wetlands and surface waters, including dredging or filling, without first having obtained approval from the Department pursuant to Condition XXXIII and XXXIV. Pursuant to Rule 62-341.620 (2)(a), F.A.C., the general permit is not offered to those transmission line projects that obtained a certification issued under Part II of Chapter 403, F.S. "*Electrical Power Plant and Transmission Line Siting*.". However, it is recognized in Rules 62-341.201(1) and 62-341.620, F.A.C. that construction of power lines and support structures pursuant to the limitations in the 62-341.620, F.A.C. general permit "have minimal impacts to the water resources of the District, both individually and cumulatively" and that "mitigation is neither necessary nor required for [such] activities." The Licensee shall submit to DEP's Southeast District Environmental Resource Permitting Section a Joint Environmental Resource Permit Application, Form#: 62-343.900(1), prior to commencing any activities in wetlands or other surface waters. Pursuant to Chapter 18-21, F.A.C., all activities on sovereignty lands shall require authorization from the Board of Trustees of the Internal Improvement Trust

Fund. Should the transmission line or pipeline corridors cross sovereignty submerged lands an easement shall be applied for and approved by the Department for such utility crossings and rights of way.

2. In determining whether to grant or deny approval, the Department shall consider whether the applicant has implemented practicable design modifications to reduce or eliminate adverse impacts to wetlands and other surface waters. If the Department determines that the Licensee's proposed system can be modified in a practicable manner that would eliminate or reduce adverse impacts to wetland functions and other surface water functions, and if the applicant refuses to modify the system accordingly, mitigation shall not be approved. Before considering mitigation, all reasonable measures must first be taken to reduce the adverse effects which otherwise render the project unapprovable. To the extent the Project strictly complies with the limitations set forth in Rule 62-341.620(2)(b)-(l), F.A.C. and is not located in forested wetlands located within 550 feet from the mean or ordinary high water line of a wetland or other surface water designated as an Outstanding Florida Water or Outstanding National Resource Water, no mitigation shall be required.

B. Construction

1. The Licensee shall avoid impacting wetlands within all certified corridors wherever practicable. When necessary and feasible, the location of the span between power poles shall be maximized or varied and other design changes shall be considered to eliminate or reduce wetland impacts.

2. The Licensee shall, wherever practicable, utilize adjacent existing public roads for access to the ROW for construction, operation and, or maintenance purposes.

3. The Licensee shall consult with DEP's Southeast District Environmental Resource Permitting Section prior to final determination of the access road locations (including those not located on the ROW), tower locations, and construction techniques which are to be reflected on any post-certification submittals. At DEP's request, the Licensee shall conduct a field inspection with DEP staff.

4. Prior to clearing activities within any of the ROWs associated with the various linear facilities, an ecological survey shall be conducted to identify the presence of threatened or endangered species (plants and animals) as defined in the Application, likely to occur in the ROW based on range and habitat. This survey shall also identify the location of any wading bird colonies within the vicinity of the project ROW that may be affected. Results of this survey shall be submitted to DEP and the Florida Fish and Wildlife Conservation Commission (FWC) and the United States Fish and Wildlife Service (USFWS). If it is determined that any of those species will be affected by the construction of any of the linear facilities, the Licensee shall consult with DEP and FWC to determine the appropriate steps to be taken to avoid, minimize, mitigate or otherwise appropriately deal with, any adverse impacts to resources within each agency's respective jurisdiction.

5. After all ROWs have been selected the Licensee shall conduct a survey of archaeological sensitive areas, as determined in consultation with the Department of State, Division of Historical Resources (DHR), where they are crossed by the ROW. This report shall be submitted to DHR. If practicable, sites considered to be eligible for the National Register shall be avoided during construction of the linear facilities, and subsequently during maintenance of the ROWs. For any other significant site, Licensee shall consult with DHR to determine appropriate action. If avoidance is not practicable, impact shall be mitigated through archaeological salvage operations or other methods acceptable to DHR.

6. All materials used for any purpose related to the construction of the transmission lines or other linear facilities shall come from fill sources in compliance with applicable local ordinances. No fill materials shall be obtained from any excavated wetlands unless authorized by DEP and SFWMD in accordance with a mitigation plan submitted in compliance with certification.

7. The Licensee shall provide mitigation/compensation (M/C) for any unavoidable wetland or open water habitat impacts within the jurisdiction of the DEP or WMD resulting from the construction of any portion of the transmission line, natural gas pipeline or power plant facilities. M/C may include the creation of new wetland or open water habitat, the restoration of degraded habitat, the enhancement of functions and values provided by existing wetland or open water habitats, removal of exotics, or other activities found by the relevant agencies and appropriate local government to be in compliance with their applicable regulations. Prior to the elimination or degradation of any such wetland or open water habitat, the Licensee shall concurrently submit mitigation plans to DEP's Southeast District Office Environmental Resources Permitting Section and SFWMD as applicable. Submission of such plans shall be for the purpose of determining compliance with the Conditions of Certification. These mitigation plans shall, at a minimum, include the following:

a. Specific acreage figures, descriptions and locations of all jurisdictional wetlands, both within the ROW as well as adjacent to it which would be impacted by the construction or ROW maintenance activities, including an explanation of why no feasible alternative exists which would avoid impact to these wetlands.

b. A discussion and a set of plan view and cross sectional drawings of the proposed mitigation activities to be undertaken, including the location of all mitigation areas and a description of the manner in which these areas will be created, restored or otherwise enhanced. Success standards will be determined based on the functional values of wetlands impacted and created. The Licensee will work with the appropriate agency staff to establish success criteria.

c. A timetable for accomplishing the proposed M/C activities (i.e., the time for commencement and completion of activities for each mitigation area) concurrently with the construction of the various aspects of proposed facilities and any associated wetland impacts.

d. A monitoring and maintenance program including success criteria, to ensure the survival and success of any created, restored, or enhanced wetlands.

8. M/C plans must be found to fully compensate for the functions and values provided by wetlands that will be degraded or eliminated. DEP and SFWMD will work with the Licensee in the development of acceptable mitigation plans. The mitigation plans proposed by the Licensee shall be submitted for review and compliance monitoring to DEP and SFWMD and such review shall be subject to the time constraints set forth in specific Conditions XXXIV.B.9 below and VI.A.2 above, as appropriate.

9. For all construction activities in waters of the state where DEP has wetland resource protection jurisdiction pursuant to Chapter 403, F.S., and the Memorandum of Understanding between the Department and SFWMD, the Licensee shall file with DEP's Office of Siting Coordination and the SE District Office Environmental Resources Permitting Section the information described in F.A.C. Rule 62-17.665; and a Joint Environmental Resource Permit Application, Form#: 62-343.900(1).

a. DEP shall promptly review the submittal for completeness and sufficiency. If the submittal is found to be incomplete or insufficient, Licensee shall be so notified. Failure to issue such a notice within 30 days after filing of the submittal shall constitute a finding of completeness and sufficiency.

b. Within 90 days of filing complete and sufficient information, DEP shall determine whether there is reasonable assurance of compliance with applicable substantive agency regulations as required by the conditions of certification if the plans are executed as filed. If it is determined that reasonable assurance has not been provided, the Licensee shall be notified with particularity and possible corrective measures suggested. Failure to notify Licensee in writing within 60 days of receipt of a sufficient information submittal shall constitute a compliance verification.

c. If DEP does not object within the time period specified, Licensee may begin construction pursuant to the terms of the conditions of certification and the subsequently submitted construction details and DEP shall provide to the Corps of Engineers a letter indicating that the full requirements of this condition have been met and the water quality certification for the purposes of 33 USC Section 1341 is thereby conveyed.

d. Licensee, at its option, may submit information for different wetlands modification activities at different time intervals. Each submittal shall be processed by DEP separately.

10. Semi-annual narrative reports shall be submitted to DEP's Southeast District Office, indicating the status of all construction activities within waters of the state. These reports shall be submitted until all construction in that respective area is complete. The reports include the following information:

a. Date the activity (dredge and fill) began; if work has not begun on site, please so indicate.

- b. Brief description and extent of work completed since the previous report.
- c. Brief description and extent of work anticipated in the next six months.

11. Upon completion of construction, the Licensee shall provide DEP with detailed engineering drawings which depict the pre and post construction contours in all areas in which construction occurred in waters of the state.

12. During construction, all exotic invasive plant species listed on the Florida Exotic Pest Plant Council's (EPPC) 2001 (or current year) Category I Invasive Exotic Species list located in each ROW shall be removed or the plants/trees cut and the stumps treated with an approved herbicide consistent with these conditions. A plan for removal and disposal of such exotic species which minimizes seed dispersal shall be developed by the Licensee in consultation with DEP. The Licensee shall abide by the plan.

13. Following construction, a plan for maintenance and control of exotic invasive plant species within the ROWs shall be developed by the Licensee in consultation with DEP. The Licensee shall abide by the plan. This maintenance clause refers to the planting or natural recruitment of the referenced plants.

14. The Licensee shall perform the work authorized under the certification in a manner so as to minimize any adverse impacts on fish, wildlife, native vegetation, natural environmental values, water resources, and water quality.

15. The Licensee shall develop a water quality monitoring program to measure the turbidity generated by construction in all open waters to be crossed by the proposed natural gas pipeline. This program shall be developed in coordination with DEP's SE District Office Environmental Resources Permitting Section and approved by DEP prior to the commencement of construction.

16. The Licensee shall be responsible for the correction of any water quality problems that result from the construction, operation and/or maintenance of works authorized under these Conditions. The Licensee will work with DEP to determine additional methods necessary to ensure that state water quality standards are not violated as a result of construction.

17. Where necessary to prevent secondary impacts to adjacent wetlands during construction, adjacent wetland areas outside of the limits of construction shall be isolated from the construction area by silt fences. These silt containment devices shall be maintained and remain in place until all construction is complete and all associated side slopes or areas denuded of vegetation have been adequately stabilized. The Licensee shall be responsible for explaining the significance of these barriers to all construction personnel prior to construction. The Licensee shall use turbidity control as necessary so that turbidity levels in adjacent areas do not

exceed 29 N.T.U.s above natural background. Any placement of fill or encroachment into jurisdictional wetlands or waterbodies outside the limits of construction shall be immediately reported to DEP's Southeast District Office. Appropriate remedial action to restore the affected area shall be immediately undertaken.

18. In addition to the erosion and turbidity control measures specified above, best management practices, including but not limited to the use of floating silt screens in flowing waters, as well as the use of staked hay bales and silt curtains, shall be used wherever necessary at all times during project construction. These erosion and turbidity control devices shall be regularly inspected and maintained when necessary. These devices shall remain in place until all construction is complete and all fill side slopes or denuded areas have been stabilized with suitable vegetation.

19. No dewatering operation shall be allowed unless the Licensee can provide reasonable assurances to DEP that no unauthorized, adverse, off site water resource impacts will occur as a result of the dewatering operation.

C. Operation

1. Ground vehicles to be used in wetlands for maintenance access shall be low ground pressure vehicles unless limited to the access roads and structure pads.

2. Only EPA approved herbicides may be used in waters of the state, or the use of other herbicides in any areas of the ROW, shall only be allowed with the concurrence of DEP.

XXXIV. DEPARTMENT OF COMMUNITY AFFAIRS

A. The Licensee shall investigate complaints of, and provide mitigation for, impacts to radio or television reception shown to be caused by the transmission line upgrade.

B. The Licensee shall develop a comprehensive hurricane preparation and recovery plan for the Martin Unit 8 Combined Cycle Project, as part of the Florida Power & Light Martin Plant. The plan shall be submitted to the Department of Community Affairs and the Martin county Office of Emergency Management no later than start of construction of the Martin Unit 8 combined cycle conversion project. The Licensee shall formally update the plan every 5 years following commercial operation of the Unit 8 Combined Cycle Project or whenever an additional generating unit is brought into commercial service at the Martin Plant site and shall submit these updated versions of the plan to the Department of Community Affairs and the Martin County Office of Emergency Management. If the Department deems the plan or any of its periodic updates not to be in compliance with the requirements of this condition, it may petition

for enforcement of this condition pursuant to the Florida Electrical Power Plant Siting Act.

XXXV.TREASURE COAST REGIONAL PLANNING COUNCIL

A. FPL shall neither eliminate nor negatively impact any wetlands on those portions of the Project site necessary for the construction and operation of Units 5 and 6 and the associated coal gasification facilities until the Florida Public Service Commission has made an affirmative Determination of Need for those facilities.

B. FPL shall modify its land management practices in the areas along the west and southwest sides of the existing cooling pond west and south of the distribution line paralleling the pond dike shown on the attached Exhibit A. In these areas FPL shall discontinue mowing and allow natural vegetation to establish itself. The goal of this practice modification will be to create a naturally vegetated corridor for wildlife passing through this area between other natural areas onsite and in the region. This practice modification shall take place consistent with safety, inspection and maintenance procedures for the dike and the adjacent distribution line and with continued access to ditches, equipment and other related facilities. To the extent feasible, within FPL routine land management practices for the site, FPL shall attempt to control exotics (specifically Melaleuca, Australian Pine and Brazilian Pepper) within this corridor.

C. FPL shall reserve the remainder of the Northwest Parcel, over and above those portions identified by FPL during these proceedings for wetland restoration, enhancement and preservation, for use in future ecological mitigation activities or preservation, and activities related to such purposes (including education and passive recreation), as may be required for the Martin Expansion project or any other project of FPL, and shall not use or develop the remainder of the Northwest Parcel for any other purpose. However, any future wetland creation undertaken within this area shall avoid conversion of high quality forested uplands. To the extent feasible, within FPL's routine land management practices for the site, FPL shall attempt to control exotic vegetation (specifically Melaleuca, Australian Pine, and Brazilian Pepper) within this area.

D. FPL shall not begin commercial operation of Martin Units 3 and 4 until the turn lane at State Road 710 and Plant Road at the FPL Martin site is lengthened to a minimum length of 600 feet along State Road 710.

E. Notwithstanding DOT conditions contained under XXXVIII below, FPL shall not begin commercial operation of Martin Units 5 and 6 until the road improvements proposed by the Florida Department of Transportation for State Road 710 through Indiantown have been completed, including the road widening of State Road 710 and the installation of a protected turn lane at State Road 710 and Adams Avenue in Indiantown.

XXXVI. MARTIN COUNTY

A. Construction and operation of the Martin Expansion Project shall be undertaken in accordance with the first amendment to the planned unit development (industrial) agreement between the Licensee and Martin County, Florida, dated June 3, 2008 Said agreement is incorporated into these Conditions of Certification by this reference and shall be complied with and enforced as if the provisions of that agreement were contained in these Conditions.

B. Martin County shall issue a permit for each transmission line crossing a Martin County road or property within the right of way identified in the ROW delineation required by Condition XXXI within 60 days after such filing.

C. Martin County shall issue a permit for each natural gas pipeline crossing a road between the junction of the Florida Turnpike and SR 714 and the site of the project within 30 days of the submission of a complete utility permit application for such natural gas pipeline.

D. In the construction of associated transmission lines, FPL shall:

1. Follow the standards of Martin County, Florida for a U 2 Permit unless FPL and Martin County subsequently agree to the contrary.
2. Make all crossings as nearly perpendicular to and place all transmission Line structures as far from state and county road rights of-way as practicable in order to allow future widening and expansion.

E. In the construction of natural gas pipeline crossings, FPL shall:

1. Follow the standards of Martin County, Florida for a U 2 Permit unless FPL and Martin County subsequently agree to the contrary.
2. Avoid locating pipeline facilities in road rights-of-way to the greatest extent practicable; in order to minimize conflict with future roadway improvements.

XXXVII. DEPARTMENT OF TRANSPORTATION

A. DOT has reviewed and approved the highway traffic analysis presented by FPL showing that there will be adequate highway capacity on State Road 710 for the implementation (construction and operation) of Phases I (consisting of Units 3 and 4), II (consisting of Martin Unit 8), and III (consisting of future Units 5 and 6) of the Project and the Martin Solar Energy Center, subject to Conditions B and C below.

B. FPL is required to reconstruct an extension to the left turn lane on State Road 710 at Plant Road, at its own expense, conforming to DOT design Standards, as approved by the District Traffic Operations Engineer. The Department agrees to process the permit application within 30 days of submittal.

C. If FPL onsite construction of Units 5 and 6 (Phase III) is accelerated, FPL shall develop and implement, at its own expense, the following traffic flow maintenance

procedures, commensurate with traffic impact, as deemed necessary by DOT to mitigate impacts of traffic generated by FPL Phase III construction. These procedures shall be implemented during the period of overlap between FPL's Phase III construction and DOT's Project No. 89070-3517:

1. Public information program on traffic coordination within and adjacent to Indiantown, between M.P. 9.715 (Plant Road) and M.P. 17-822 (SR 76 Connector) during DOT construction of SR 710 between M.P. 14.415 and M.P. 16.620 as part of WPI No 4126244,
2. The use of existing railroad facilities for delivery of equipment and materials to the FPL construction site to the extent practicable,
3. Park and ride and/or car pooling programs for FPL construction personnel and/or operations staff,
4. Provision of officials, at FPL expense, to direct traffic within and adjacent to the DOT construction site,
5. Provision of temporary traffic control devices, which may include traffic signals, signage, pavement markings or construction barricades, at FPL expense, as deemed necessary by DOT to mitigate impacts of FPL construction traffic within the construction zone of the DOT project, including approaches and exits,
6. Provision of temporary travel lanes, to the extent practicable, within the DOT right-of-way and within the limits of the DOT project, at FPL expense, as deemed necessary by DOT, to mitigate impacts of FPL construction traffic.

D. Adequacy of highway capacity on State Road 710 to serve the operation of Phase IV of FPL's Project shall be addressed by FPL and DOT during the supplemental application for site certification authorizing construction and operation of Phase IV.

E. There is adequate distance between the intersections of State Road 710 with Adams Avenue and of the CSX Railroad track with Adams Avenue, in Indiantown, Martin County, Florida, for satisfactory movement of road traffic without requiring signal synchronization at the two intersections.

F. It is unnecessary for FPL and DOT to address any question concerning the impacts of rail traffic on highway traffic in connection with Phase I; however, FPL and DOT each reserve the right to take any position with respect to any question of the impacts of rail traffic on highway traffic in supplemental application proceedings for the certification of Phases III and IV for construction and operation.

G. For Phase I, The Department of Transportation Turnpike Office shall issue a utility permit for a natural gas pipeline crossing at a location mutually agreed upon by

the permit applicant and the Turnpike, consistent with requirements of the Site Certification Order, within 60 days of the submission of a satisfactorily completed utility permit form 592 02, executed by the owner of proposed gas pipeline, and which utility permit form and applicant information is in compliance with the requirements of the Utility Accommodation Guide (dated May, 1990). The plans referenced in 2.B. (1) of the Utility Accommodation Guide (UAG) and the elevations of this pipeline referenced in the UAG shall be tied to the State Planes Coordinates, for the purpose of loading the information into DOT's Computer Aided Design and Drafting (CADD) System. Any references in the Utility Accommodation Guide and permit to Department District Officials shall be deemed to mean Turnpike Officials.

H. In the construction of the natural gas pipeline system for Phase I, FPL shall comply with the requirements of the UAG, Turnpike Bond Resolution conditions and permit conditions based on either of them.

I. For Phase I, DOT shall issue a permit for the transmission line crossing of State Road 710 within the FPL right of way for such transmission line as identified in the SCA within 30 days of the submission of a complete utility permit application and detailed construction plans for such transmission line crossing.

J. In the construction of the associated transmission line crossing of State Roads 710 and 76, FPL shall:

1. Comply with the requirements of the DOT Utility Accommodation Guide and permit conditions based on them;
2. Construct such transmission line crossing with the same alignment as the existing transmission line at the same crossing; and
3. Place transmission line structures as far from the right-of-way of State Roads 710 and 76 as practicable in order to allow future road widening and expansion.

K. For Phase I, DOT shall issue a permit for the natural gas pipeline crossing of any state road within the corridor for such facility as identified in the SCA within 30 days of submission of a complete utility permit application and detailed construction plans for such pipeline crossing; provided, however, that:

1. DOT shall have 60 days to issue a permit for any crossing of Interstate 95 to allow time for review of the crossing by the Federal Highway Administration; and
2. DOT shall have the additional time reasonably necessary under the applicable bond indenture(s) to issue a permit for any crossing of the Florida Turnpike.

L. In the construction of the natural gas pipeline crossings for Phase I, FPL shall:

1. Comply with the requirements of the DOT Utility Accommodation Guide and permit conditions based on them; and

2. Avoid locating pipeline facilities in road rights-of-way to the greatest extent practicable in order to minimize conflict with future roadway improvements;

3. Make no pipeline placement longitudinally in the rights-of-way for Interstate 95 or the Florida Turnpike; and

4. Comply with any special provisions governing crossings of the Florida Turnpike made applicable under the bond indenture(s) for the Florida Turnpike.

M. Post Certification Review Of Specific Problems (Phase II)

1. Access Management to the State Highway System

No new access to the State highway system is proposed in the site certification application. If new access is later proposed, access permitting as defined in Rule Chapters 14-96, State highway System Connection Permits, Administrative process, and 14-97, State highway System Access Management Classification System and Standards, Florida Administrative Code, will be required.

2. Overweight or Over Dimensional Loads

Operation of overweight or overdimensional loads by the applicant on State transportation facilities during construction and operation of the utility facility will be subject to the requirements of Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permitting Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code.

3. Use of State of Florida Right of Way or Transportation Facilities

Any use of State of Florida right of way and certain activities on State transportation facilities will be subject to the requirements of the Department of Transportation's Utility Accommodation Manual (Document 710-020-001) and Rule Chapter 14-46, Railroads/Utilities Installation or Adjustment, Florida Administrative Code. Any new or additional interconnections between the power plant and any off-site water reuse system may require the applicants to meet the requirements of the Utility Accommodation Manual if the installation of these interconnections fall within State of Florida right of way or a state transportation facility.

4. Drainage

Any drainage onto State of Florida right of way and transportation facilities will be subject to the requirements of Rule Chapter 14-86, Drainage Connections, Florida Administrative Code. FPL shall submit information to FDOT on adopted agency forms demonstrating compliance with applicable drainage-related standards. That submittal

shall be governed by the procedures of Conditions XXXII and XXXIII for post-certification submittals. FPL shall locate and construct transmission lines in such manner so as not to interfere with, obstruct, or otherwise adversely impact any drainage from DOT's existing or announced planned transportation facilities. FPL agrees to provide DOT a drainage easement to accommodate such transportation facilities in or across the fee-owned transmission line right of way consistent with the operation of the transmission line, if such becomes necessary to comply with requirements of a water management district or DEP.

N. Best Management Practices

1. Transportation Control

Traffic control will be maintained during plant construction and maintenance in compliance with the standards contained in the Manual of Uniform Traffic Control Devices, Rule Chapter 14-94, Statewide Minimum Level of Service Standards, Florida Administrative Code; Florida Department of Transportation's Design Standards; and Florida Department of Transportation's Specifications for Roads and Bridge Construction, whichever is more stringent.

2. Overweight/Overdimensional Vehicles

If the applicant uses contractors for the delivery of any overweight or overdimensional loads to the site during construction, the applicant should assure that its contractors adhere to the necessary standards and receive the necessary permits required under Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permitting Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code.

XXXVIII. BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND

A. The Board of Trustees of the Internal Improvement Trust Fund (Board), or its staff shall issue the appropriate approval for a natural gas pipeline crossing lands and waterways between the junction of the Florida Turnpike and SR 714 under the jurisdiction of the Board within 30 days of the submission of a complete application for such natural gas pipeline crossing demonstrating compliance with the applicable provisions of Chapter 18-21, Florida Administrative Code.

B. In the Phase I construction of the associated transmission line or the natural gas pipeline system, FPL shall follow the standards of the Board as established in Chapter 18-21, Florida Administrative Code, unless FPL and the Board subsequently agree to the contrary.

XXXIX. TROUP-INDIANTOWN IRRIGATION DISTRICT

A. FPL shall locate all transmission line structures installed as part of the proposed transmission line upgrade within the existing FPL right-of-way where it crosses any canal or roadway under the jurisdiction of the Troup-Indiantown Irrigation District (District). Prior to installing any new transmission line structures as part of this Project within any canal or road rights-of-way under the jurisdiction of the District, FPL shall consult with District staff on the appropriate location of such structures so as to avoid any conflict or interference with the District's activities within those rights-of-way.

B. Upon completion of construction of the transmission line structures, FPL shall supply the District with drawings or other appropriate information depicting the location of those transmission line structures installed adjacent to roads and canals under the District's jurisdiction.

XL. CONSTRUCTION

A. Standards and Review of Plans

1. All construction at the facility shall be pursuant to the design standards presented in the application or amended application and the standards or plans and drawings submitted and signed by an engineer registered in the state of Florida. Specific Southeast DEP District Office acceptance of plans will be required based upon a determination of consistency with approved design concepts, regulations, and these conditions prior to initiation of construction of any phases: industrial waste treatment facility; domestic waste treatment facility; potable water treatment and supply system; ground water monitoring system, storm water control system; solid waste disposal area; and hazardous or toxic handling facility or area. The Licensee shall present specific plans for these facilities including any required application for an NPDES Construction Stormwater Discharge Permit for review by the DEP Southeast District Office or SFWMD as applicable at least ninety (90) days prior to construction of those portions of the facility for which the plans are then being submitted, unless other time limits are specified in the conditions herein. Review and approval or disapproval shall be accomplished in accordance with Chapter 120, F.S., or these conditions of certification as applicable.

2. The Department must be notified in writing and prior written approval obtained for any material change, modification, or revision to be made to the project during construction which is in conflict with these conditions of certification. If there is any material change, modification, or revision made to a project approved by the Department without this prior written approval, the project will be considered to have been constructed without departmental approval, the construction will not be cleared for service, and the construction will be considered a violation of the conditions of certification.

3. Ninety (90) days prior to the anticipated date of first operation, the Licensee shall provide the Southeast District and the Siting Coordination Office of the Department with an itemized list of any changes made to the facility design and operation plans that would affect a change in discharge as referenced in Condition XII. since the time of the approval of these conditions. This pre-operational review of the final design and operation shall demonstrate continued compliance with Department rules and standards.

4. Final drainage plans illustrating all stormwater treatment facilities and conveyances for construction phases and ultimate operations for the entire Martin Expansion Project site shall be submitted to the SFWMD in accordance with Condition VI.C. for review and approval prior to construction of any such conveyance or facility. The SFWMD shall indicate its approval or disapproval within 60 days of the submittal.

B. Control Measures

1. To control runoff which may reach and thereby pollute waters of the state, necessary measures shall be utilized to settle, filter, treat or absorb silt containing or pollutant laden storm water to ensure against spillage or discharge of excavated material that may cause turbidity in excess of 29 Nephelometric Turbidity Units (NTU) above background in waters of the state at the site boundary. Oil and grease shall not exceed 5 mg/l at any discharge from the makeup water storage supply pond or any other pond. Control measures may consist of sediment traps, barriers, berms, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment-laden runoff. The pH of the runoff shall be kept within the range of 6.0 to 8.5. The Licensee shall comply with the applicable nonprocedural requirements in Chapter 62-25, F.A.C.

2. Any open burning in connection with initial land clearing shall be in accordance with Chapter 62-256, F.A.C., Chapter 51-2, F.A.C., Uniform Fire Code Section 33. 1 01 Addendum, and any other applicable County regulation. Any burning of construction-generated material, after initial land clearing that is allowed to be burned in accordance with Chapter 62-256, F.A.C., shall be approved by the DEP Southeast District office in conjunction with the Division of Forestry and any other county regulations that may apply. Burning shall not occur if not approved by the appropriate agency or if the Department or the Division of Forestry has issued a ban on burning due to fire safety conditions or due to air pollution conditions.

3. Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the appropriate local health agency. The sewage treatment plant shall be operated in accordance with Chapters 62-600-62-699, F.A.C.

4. The Licensee shall employ proper odor and dust control techniques to minimize odor and fugitive dust emissions. The applicant shall employ control

techniques sufficient to prevent nuisance conditions which interfere with enjoyment of residents of adjoining property.

5. Directly associated transmission lines from the facility electric switchyard to existing transmission lines shall be maintained in accordance with the application and the appropriate state and federal regulations concerning use of herbicides. The Licensee shall notify the Department of the type of herbicides to be used at least 60 days prior to their first use.

6. Dewatering operations during construction shall be carried out in accordance with Rule 62-621.300(2), F.A.C.

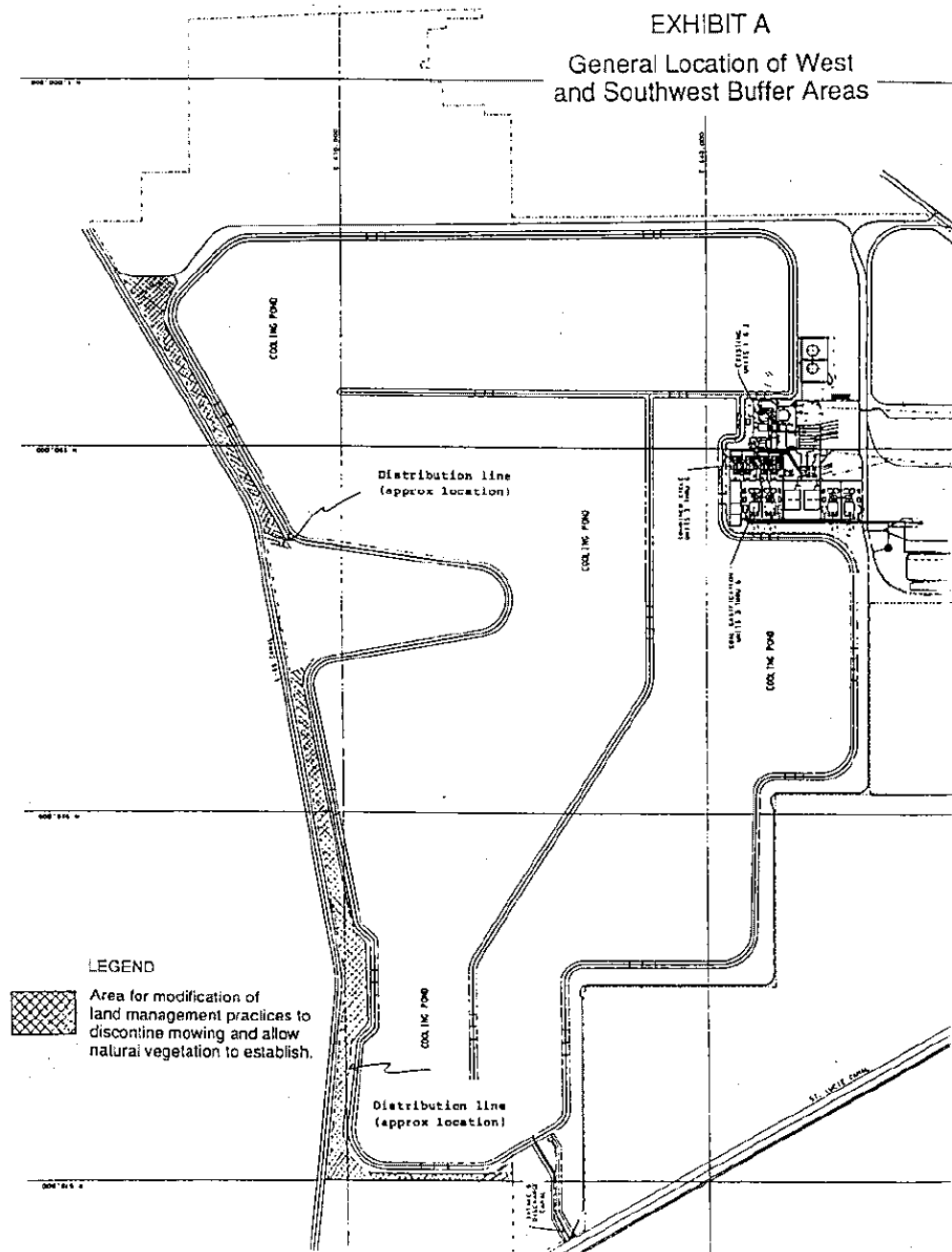
C. Reporting

Notice of commencement of construction shall be submitted to the Siting Coordination Office and the DEP SE District Office within fifteen (15) days of initiation. Starting three (3) months after construction commences, a quarterly construction status report shall be submitted to the DEP SE District Office. The report shall be a short narrative describing the progress of construction.

History Notes

Certification Issued 02/20/91; signed by Governor Chiles
Modification 08/11/93; signed by Secretary Wetherell
Modification 09/27/94; signed by Secretary Wetherell
Modification 04/28/95; signed by Secretary Wetherell
Modification 04/22/96; signed by Secretary Wetherell
Modification 11/23/98; signed by Secretary Green
Modification 08/21/00; signed by Deputy Secretary Green
Modification 06/15/01; signed by Secretary Struhs
Expansion Project Certification Issued 04/14/03; signed by Governor Bush
Modification (H) 09/14/04; signed by Program Administrator Oven
Modification (I) 05/20/05; signed by Program Administrator Oven
Modification (J) withdrawn 12/28/05
Modification (K) 11/15/06; signed by Program Administrator Oven
Modification (L) 07/09/07; signed by Program Administrator Halpin
Modification (M) 08/21/08; signed by Program Administrator Halpin

Exhibit A to Condition XXXVI.B.



APPENDIX 1 - Permit 0850001-016-AC

January 16, 2007

Electronically Sent – Received Receipt Requested

Mr. Craig Arcari, Plant General Manager
Martin Power Plant
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, Florida 33408

Re: DEP File No. 0850001-016-AC
PSD-FL-146C and PSD-FL-327B
Combined Cycle Units 3, 4 and 8

Dear Mr. Arcari:

The Florida Department of Environmental Protection (“the Department”) reviewed your application to make some minor modifications to the PSD Permits related to Combined Cycle Units 3, 4 and 8 in conjunction with issuance of a Title V Operation Permit Renewal that incorporates the recently constructed Unit 8. The changes primarily address startup, testing, and as-built equipment descriptions.

The PSD Permit for Unit 8 has not yet expired. Therefore the changes requested will be addressed as an Air Construction Permit Modification and will also address the requests related to Units 3 and 4 to make them enforceable so they can be included in the requested Title V Operation Permit Renewal.

The Department addressed each request in its Technical Evaluation dated December 1, 2006. Following are the new conditions and changes to previous conditions applicable to Units 3, 4 and 8.

NEW CONDITIONS APPLICABLE TO COMBINED CYCLE UNITS 3 AND 4

The following condition supersedes Specific Condition No. 1 of PSD-FL-146 as previously modified on September 6, 1996.

1. Permitted Capacity. The maximum heat input to each Combustion Turbine (CT) shall neither exceed 1966 mmBtu/hr while firing natural gas, nor 1846 mmBtu/hr while firing fuel oil @ 40 degrees F. These heat input limitations are subject to change. Any changes shall be provided at least 90 days before commercial operation for each fuel available to the site which a unit is capable of firing, at which time this condition may be modified to reflect those parameters. Each combined cycle’s fuel consumption shall be continuously determined and recorded.

Operation During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. Permitted capacity and operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.

If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for

no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

If tested at less than capacity, the entire heat input versus inlet temperature curves will be adjusted by the increment equal to the difference between the design heat input value and 110 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.

[Rule 62-4.160(2), Rule 62-297.310(2), and Rule 62-210.200(PTE), F.A.C.; PSD-FL-146 and PSD-FL-146A (0850001-002 and 0850001-003-AC issued 9/6/96); Specific Condition No. 1. Rescission of Guidance DARM-EM-05; and Applicant Request dated April 5, 2006, Permit No. 0850001-016-AC.]

The following condition supersedes Specific Condition No. 10 of PSD-FL-146 as previously modified on September 6, 1996.

10. Compliance Test Methods: Tests shall be conducted using EPA reference methods, or equivalent, in accordance with 40 CFR 60 Appendix A.

Pollutant	EPA Reference Method	Initial testing		Annual testing	
		Gas	Oil	Gas	Oil
Particulate Matter (PM)	5 or 17		X		X
Sulfuric Acid Mist (SAM)	8		X		
Visible Emissions (VE)	9	X	X	X	X
Carbon Monoxide (CO)	10	X	X	X	X
Nitrogen Oxides (NOx)	7E, 20	X	X	X	X
Volatile Organic Compounds	18, 25 or 25A**	X	X		
	Test Method				
Lead (Pb)	EMTIC Test Method, or Method 7090, or 7091*		X		
Beryllium (Be)	EMTIC Test Method, or Method 104, or Method 7090, or 7091*		X		
Sulfur content	ASTM D 2880-96		X		X
	ASTM D 1072-90(94) E-1, ASTM D 3031-81(86), ASTM D 4084-94, or ASTM D 3246-92	X		X	
Mercury (Hg)	40 CFR 61, Appendix B EPA Reference Method 101*	X	X		

* Method 3040 sample extraction shall be used as described in the EPA solid waste regulations SW 846.

** EPA Method 18 may be conducted to account for the non-regulated methane fraction of the measured VOC emissions.

The stack test for each turbine shall be performed within 10% of the maximum heat rate input for the tested operating temperature. See Specific Condition No.1 of PSD-FL-146C for utilization of ambient temperature versus heat input curves during compliance testing.

Initial (I) compliance tests shall be performed on each Combustion Turbine using both fuels (based on information provided by the applicant, initial testing using distillate oil has not been done). It is not necessary to plan the firing of a fuel solely to complete the initial compliance test; instead, the initial test may be postponed until such time as the untested fuel is ready for service.

Annual (A) compliance tests shall be conducted for each combustion turbine to demonstrate compliance with the permitted emissions standards for normal gas firing, gas firing with power augmentation, and backup distillate oil firing. CO and NO_x performance tests shall be conducted concurrently. If conducted at permitted capacity, NO_x emissions data collected during the annual NO_x continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the required annual performance test. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th).

For each combustion turbine that fires distillate oil for less than 400 hours during the previous federal fiscal year, the annual performance tests when firing distillate oil for the current federal fiscal year of operation are not required. Combustion turbines firing more than 400 hours on oil will also be required to demonstrate compliance with PM standards.

For each combustion turbine that operates with power augmentation for less than 400 hours during the previous federal fiscal year, the annual performance tests when operating with power augmentation for the current federal fiscal year of operation are not required. During power augmentation each unit shall comply with the emissions limits stated in Specific Condition No.4 of PSD-FL-146.

[40 CFR Appendix A; Rule 62-204.800, F.A.C. and Rule 62-297.310(7)(a)4., F.A.C.; PSD-FL-146, Specific Condition No. 10; and applicant request letter dated April 5, 2006.]

MODIFICATIONS OF AIR CONSTRUCTION/PSD PERMIT 327 - COMBINED CYCLE UNIT 8

Specific conditions listed in Section III, Part A, No. 3, and No. 16, the entire Part B, and Part D, No. 1 are hereby modified; new Specific Condition No. 5 is added to Part D as shown below. Double-underline denotes additions and strikethrough (~~strikethrough~~) indicates deletions.

Section III, Part A - Combined Cycle Gas Turbines (EU 011, 012, 017 and 018)

Specific Condition No. 3 is modified as follows:

Gas Turbines: The permittee is authorized to install, tune, operate, and maintain four General Electric Model PG7241FA gas turbine-electrical generator sets each with a generating capacity of 170 MW. Each gas turbine shall include a modern ~~the Speedtronic™~~ automated gas turbine control system and have dual-fuel capability. Ancillary equipment includes an inlet air filtration system, an evaporative inlet air-cooling system, and a bypass stack for simple cycle operation. The gas turbines will utilize the “hot nozzle” DLN combustors, ~~which require natural gas to be preheated to approximately 290° F before combustion to increase overall unit efficiency.~~ Gas-fired Electric fuel heaters will preheat the natural gas during simple cycle operation and during startup to combined cycle operation. For full combined cycle operation, feedwater heat exchangers will preheat the natural gas.

Specific Condition No. 16.a is modified as follows:

Steam Turbine/HRSG System Cold Startup: For cold startup of the steam turbine system, excess emissions from any gas turbine/HRSG system shall not exceed ~~six~~ eight hours in any 24-hour period. Cold startup of the steam turbine system shall be completed within twelve hours. A cold “startup of the steam turbine system” is defined as startup of the 4-on-1 combined cycle system following a shutdown of the steam turbine lasting at least 48 hours. {Permitting Note: During a cold startup of the steam turbine system, each gas turbine/HRSG system is sequentially brought on line at low load to gradually increase the temperature of the steam-electrical turbine and prevent thermal metal fatigue. Note that shutdowns and documented malfunctions are separately regulated in accordance with the requirements of this condition.}

Specific Condition No. 16.d is modified as follows:

Fuel Switching: For ~~oil-to-gas~~ fuel switching (oil to gas or gas to oil), excess emissions shall not exceed one (1) hour in any 24-hour period.

The rest of Specific Condition 16 is unchanged.

Section III, Part B. Gas-Fired Fuel Heaters (EU 013)

This Part is deleted since FP&L installed Electrical Heaters to heat the fuel.

Section III, Part C. Cooling Tower (EU 020)

Specific Condition No. 1 is modified as follows:

Cooling Tower: The permittee installed one new 22-cell mechanical draft cooling tower with the following design characteristics: a circulating water flow rate of 310,000 gpm; design hot/cold water temperatures of 104° F/90° F; a design air flow rate of 1,386,055 per cell; a liquid-to-gas air flow ratio of 1.4; and drift eliminators with a drift rate of no more than 0.001 percent. ~~The permittee shall submit the final design details within 60 days of selecting the vendor.~~ [Application; Design]

(No other changes were made to Section III, Part C)

Section III, Part D. Distillate Oil Storage Tank (EU 014)

Specific Condition No. 1 is modified as follows:

NSPS Subpart Kb Applicability: The distillate oil tanks are not subject to Subpart Kb, which applies to any storage tank with a capacity greater than or equal to 10,300 gallons (40 cubic meters) that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984. Tanks with a capacity greater than or equal to 40,000 gallons (151 cubic meters) storing a liquid with a maximum true vapor pressure less than 3.5 kPa are exempt from the General Provisions (40 CFR 60, Subpart A) and from the provisions of NSPS Subpart Kb. ~~except for the record keeping requirements specified below.~~

[40 CFR 60.110b(a) and (c) and Rule 62-204.800(7)(b), F.A.C.]

A new condition, Specific Condition No. 5, is added to Section III, Part D as follows:

Fuel Oil Records: The permittee shall keep readily accessible records showing the maximum true vapor pressure of the stored liquid. The maximum true vapor pressure shall be less than 3.5 kPa. Compliance with this condition may be demonstrated by using the information from the respective MSDS for the low or ultralow sulfur fuel oil stored in the tanks.

[62-4.070(3) F.A.C.]

{Permitting Note: An evaluation of several Material Safety Data Sheets (MSDS) by the Department demonstrated that the vapor pressure is much less than 3.5 kPa for low sulfur fuel oil and for ultralow sulfur fuel oil.}

(No other changes were made to Section III, Part D)

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. Any party to this permitting decision (order) has the right to seek judicial review of it under Section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Joseph Kahn, Director
Division of Air Resource Management

CERTIFICATE OF SERVICE

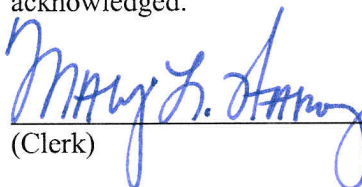
The undersigned duly designated deputy agency clerk hereby certifies that this FINAL PERMIT MODIFICATION was sent by electronic mail (with Received Receipt) before the close of business on 1/17/07 to the person(s) listed:

Craig Arcari, Florida Power & Light Company: craig_arcari@fpl.com
John Hampp, Florida Power & Light Company: john_hampp@fpl.com
Darrel Graziani, P.E., Southeast District Office: darrel.graziani@dep.state.fl.us
Jim Little, U.S. EPA, Region 4: little.james@epamail.epa.gov
Kennard F. Kosky, P.E., Golder Associates, Inc.: kkosky@golder.com
Mike Halpin, P.E., Siting Office: mike.halpin@dep.state.fl.us

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 1/17/07
(Clerk) (Date)

APPENDIX 2 – Permit 0850001-017-AV

NOTICE OF FINAL TITLE V AIR OPERATION PERMIT

In the Matter of an
Application for a Title V Permit Revision:

Mr. Craig Arcari, Plant General Manager Florida Power & Light Company 700 Universe Boulevard Juno Beach, Florida 33408	DEP Files: FINAL Title V Permit No. 0850001-017-AV Facility: Martin Power Plant Location: Martin County
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Enclosed is the FINAL Permit, No. 0850001-017-AV. The purpose is for the revision of the Title V Air Operation Permit 0850001-013-AV. The facility is located in Martin County, Florida. This permit revision is issued pursuant to Chapter 403, Florida Statutes (F.S.). No comments were received from Region 4, U.S. EPA.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.



Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/aal/th

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) and all copies were sent electronically (with Received Receipt) before the close of business on 3/26/01 to the person(s) listed below:

Copy furnished to:

Craig Arcari, Florida Power & Light Company: craig_arcari@fpl.com

John Hampp, Florida Power & Light Company: john_hampp@fpl.com

Darrel Graziani, P.E., Southeast District Office: darrel.graziani@dep.state.fl.us

Jim Little, U.S. EPA, Region 4: little.james@epamail.epa.gov

Kennard F. Kosky, P.E., Golder Associates, Inc.: kkosky@golder.com

Mike Halpin, P.E., Siting Office: mike.halpin@dep.state.fl.us

Barbara Friday, BAR: barbara.friday@dep.state.fl.us

FINAL Determination

Title V Air Operation Permit Revision
FINAL Permit No.: 0850001-017-AV
Florida Power & Light Company
Martin Plant
Page 1 of 1

I. Comment.

No comments were received from the USEPA during their 45 day review period of the PROPOSED Permit.

II. Conclusion.

In conclusion, the permitting authority hereby issues the FINAL Permit.

STATEMENT OF BASIS

Title V Permit Revision No. 0850001-017-AV
Federal Acid Rain Program ORIS Code **6043**

Florida Power and Light Company
Martin Power Plant
Martin County

These permitting actions are issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

EXISTING FACILITY

This facility is owned by Florida Power & Light Company (FP&L) and is known as the Martin Power Plant, near Indiantown in Martin County, Florida. It consists of:

- Two 863 megawatts (MW) residual fuel oil and natural gas fired conventional steam electric generating units (Units 1 and 2), that started up in 1980/81 and are equipped with multicyclones and Low NO_x burners;
- Two nominal 500 MW natural gas fueled combined cycle units (Units 3 and 4), that started up in 1994 and are equipped with Dry Low NO_x (DLN) combustors;
- One nominal 1,150 MW natural gas-fueled combined cycle unit (Unit 8), that started up in 2005 and is equipped with DLN combustors and selective catalytic reduction (SCR) systems for nitrogen oxides control; and
- Ancillary equipment including an auxiliary steam boiler, gas heaters, diesel generators, fuel oil storage tanks, and mechanical cooling towers.

PRESENT AUTHORITY TO OPERATE FACILITY

With the exception of Unit 8, the facility operates under Title V Operation Permit 0850001-013-AV effective January 1, 2004 and expires on December 31, 2008. Combined Cycle Unit 8 operates under the authority of Air Construction/PSD Permit No. 0850001-010-AC (PSD-FL-327). The Unit 8 Air Construction/PSD Permit authorized construction of two combustion turbine electrical generators (CTs) along with four duct-fired heat recovery steam generators (HRSGs), a single steam turbine-electrical generator (STG) and ancillary equipment. The Unit 8 project incorporated the new construction along with two previously constructed Simple Cycle CTs (Units 8A and 8B) into a single Combined Cycle Unit 8. The mentioned construction permit was issued April 16, 2003.

PURPOSE OF REVISION TO TITLE V OPERATION PERMIT

The primary purpose of the present application is to revise the facility's Title V Operation Permit to include the recently constructed Combined Cycle Unit 8 and to incorporate the revisions in the concurrent Air Construction Permit Modification.

CONCURRENT AIR CONSTRUCTION PERMITTING ACTIONS

FP&L requested a concurrent Air Construction Permit Modification primarily to establish certain startup, testing, and operational conditions for Martin Power Plant Combined Cycle Units 3, 4 and 8. The Department evaluated each of these requests in the separate Technical Evaluation dated December 1, 2006 that supports the concurrent Air Construction Permit modification.

A Modification of the current Unit 8 Air Construction Permit will be issued that will allow excess emissions from individual CT/HRSG sets for a period of eight rather than six hours during future cold startups of the 470 MW STG. Such cold startups of a STG are infrequent and typically years apart for baseloaded combined cycle units.

The Air Construction Permit Modification also addresses a request by FP&L to allow annual testing of Units 3 and 4 to be conducted at 90 to 100 percent of capacity rather than 95 to 100 percent. The request is consistent with the requirements in the original Air Construction/PSD Permit for Units 3 and 4. The Modification will also recognize a high power mode of operation known as power or steam augmentation. This is a feature included in the original design and actual construction of Units 3 and 4 within the permitted heat input and emission limits.

This FINAL Title V Operation Permit Revision incorporates the conditions of the Unit 8 Air Construction Permit 0850001-010-AC as well as the conditions in the Air Construction Permit Modification 0850001-016-AC.

REVISIONS TO TITLE V OPERATION PERMIT 0850001-013-AV

The changes are shown below (~~striketrough~~) or double-underlined.

Section II. Facility - Wide Conditions

FP&L requests deletion of Section II, Specific Condition No. 11 that states:

"Please be advised that the Department does not condone nor authorize the permittee to by-pass waste materials from either air or wastewater facilities at any time that would result in a violation of the rules and regulations of the Department. In case of breakdown or lack of proper functioning of the facility causing or likely to cause discharge of improperly treated sewage or air emissions, it shall be the duty of the owner of the facility to promptly notify the Department. In addition to notifying this Department, the permittee shall notify the local County Health Officer. The owner of the impaired facility causing the violation shall be responsible for any and all damages which may result. If violations of State standards occur, enforcement actions may be initiated. [AC43-4037; and AC43-4038]"

The Department notes that the condition is verbatim from the original air construction permits issued in 1977 for the two 863 megawatt units. The Department will move the condition to Section III, Subpart A, related to Units 1 and 2 so that it is not applicable to units constructed thereafter. The condition reference is A.48 in the attached Final Title V Operation Permit Revision.

Section III. Emissions Units and Conditions

Subsection B. Specific Condition 3. Subsection B contains the conditions applicable to Combined Cycle Units 3 and 4. Changes to Specific Condition 3 are needed to allow annual testing in the range of 90 to 100 percent of capacity. The rationale is given in the Technical Evaluation in support of the air construction permit modification where the underlying enforceable conditions are being changed. The condition has been rewritten to accurately state the Department's rule and the concurrent air construction permit modification. Specific Condition B.3 is modified as follows:

B.3. Permitted Capacity. The maximum heat input to each Combustion Turbine (CT) shall neither exceed 1966 mmBtu/hr while firing natural gas, nor 1846 mmBtu/hr while firing fuel oil @ 40 degrees F. These heat input limitations are subject to change. Any changes shall be provided at least 90 days before commercial operation for each fuel available to the site which a unit is capable of firing, at which time this condition may be modified to reflect those parameters. Each combined cycle's fuel consumption shall be continuously determined and recorded.

Operation During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 95 to 100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test maximum operation rate allowed by the permit. Permitted capacity and operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.

If it is impractical to test at permitted capacity, ~~then the units~~ an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110

percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

In such cases, If tested at less than capacity, the entire heat input versus inlet temperature curves will be adjusted by the increment equal to the difference between the design heat input value and ~~405~~ 110 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.

[Rule 62-4.160(2), Rule 62-297.310(2), and Rule 62-210.200(PTE), F.A.C.; PSD-FL-146 and PSD-FL-146A (0850001-002 and 0850001-003-AC issued 9/6/96); Specific Condition No. 1. Rescission of Guidance DARM-EM-05; and Applicant Request dated April 5, 2006, Permit No. 0850001-016-AC]

Subsection B. Specific Condition 27. Subsection B, Specific Condition 27 relates to annual testing. The condition is being revised to reflect certain changes authorized through the concurrent Air Construction Permit Modification. These include use of EPA Methods 25 and 25A and 7E to determine VOC and NO_x emissions during all conditions (including power augmentation). Specific Condition B. 27 is reorganized and modified as follows:

B.27. It is not necessary to plan the firing of a fuel solely to complete the initial compliance test; instead, the initial test may be postponed until such time as the untested fuel is ready for service.

Compliance Test Methods. Tests shall be conducted using EPA reference methods, or equivalent, in accordance with the July 1, 1996 version of 40 CFR 60 Appendix A.

Pollutant	EPA Reference Method	Initial testing		Annual testing	
		Gas	Oil	Gas	Oil
Particulate Matter (PM)	5 or 17		X		X
Sulfuric Acid Mist (SAM)	8		X		
Visible Emissions (VE)	9	X	X	X	X
Carbon Monoxide (CO)	10	X	X	X	X
Nitrogen Oxides (NO _x)	<u>7E</u> , 20	X	X	X	X
Volatile Organic Compounds	18, <u>25</u> or <u>25A**</u>	X	X		
	Test Method				
Lead (Pb)	EMTIC Test Method, or Method 7090, or 7091*		X		
Beryllium (Be)	EMTIC Test Method, or Method 104, or Method 7090, or 7091*		X		
Sulfur content	ASTM D 2880-96		X		X
	ASTM D 1072-90(94) E-1, ASTM D 3031-81(86), ASTM D 4084-94, or ASTM D 3246-92	X		X	
Mercury (Hg)	40 CFR 61, Appendix B EPA Reference Method 101*	X	X		

* Method 3040 sample extraction shall be used as described in the EPA solid waste regulations SW 846.

** EPA Method 18 may be conducted to account for the non-regulated methane fraction of the measured VOC emissions.

The stack test for each turbine shall be performed within 10% of the maximum heat rate input for the tested operating temperature. See Specific Condition B.3 for utilization of ambient temperature versus heat input curves during compliance testing. Annual (A) compliance tests shall be performed on each combustion turbine with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods, or equivalent, in accordance with the July 1, 1996 version of 40 CFR 60 Appendix A.

Initial (I) compliance tests shall be performed on each Combustion Turbine using both fuels. (Note: Based on information provided in the Title V Permit Application, initial testing using distillate oil has not been done). See Specific Condition B.3 for utilization of ambient temperature versus heat input curves during compliance testing. It is not necessary to plan the firing of a fuel solely to complete the initial compliance test; instead, the initial test may be postponed until such time as the untested fuel is ready for service.

Annual (A) compliance tests shall be conducted for each combustion turbine to demonstrate compliance with the permitted emissions standards for normal gas firing, gas firing with power augmentation, and backup distillate oil firing. CO and NOx performance tests shall be conducted concurrently. If conducted at permitted capacity, NOx emissions data collected during the annual NOx continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the required annual performance test. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th).

For each combustion turbine that fires distillate oil for less than 400 hours during the previous federal fiscal year, the annual performance tests when firing distillate oil for the current federal fiscal year of operation are not required. Combustion turbines firing more than 400 hours on oil will also be required to demonstrate compliance with PM standards.

For each combustion turbine that operates with power augmentation for less than 400 hours during the previous federal fiscal year, the annual performance tests when operating with power augmentation for the current federal fiscal year of operation are not required. During power augmentation each unit shall comply with the emission limits stated in Specific Condition B.6.

[40 CFR Appendix A; Rule 62-204.800, F.A.C. and Rule 62-297.310(7)(a)4, F.A.C.; PSD-FL-146, Specific Condition No. 10; and applicant request letters dated July 28, 1998 and April 5, 2006.]

Subsections F and G. Subsections F and G comprise the Specific Conditions applicable to Units 8A and 8B when they operated as Simple Cycle Units. These Subsections will be marked "reserved" and the Specific Conditions are deleted in their entirety. The operation of Units 8A and 8B will be fully addressed in Subsection H that describes the operation of the recently constructed and tested Combined Cycle Unit 8.

Subsections H, I and J. New Subsections H, I and J include all of the Specific Conditions applicable to the new Combined Cycle Unit 8 (including ancillary equipment) authorized under AC/PSD Permit No. 0850001-010-AC (PSD-FL-327) and any modification thereto.

All conditions of PSD-FL-327 including the present AC/PSD Permit Modification are transferred verbatim except for obsolete construction conditions. Please refer to the new Subsections H, I, and J in the attached FINAL Title V Operation Permit Revision.

Section IV - Acid Rain Part

Section IV is updated to reflect the Combined Cycle Unit 8 operation system. This involves adding Units 8C and 8D. Previously permitted Units 8A and 8B that, together with Units 8C and 8D, comprise Unit 8 were added during the previously issued Title V Operation permit.

Compliance Plan CP-1

The revised Compliance Plan CP-1 addresses test requirements applicable to Combined Cycle Unit 8 when the individual combustion turbines operate and are tested in high power modes known as peaking and power augmentation. The revised Compliance Plan CP-1 replaces the previous CP-1 that addressed similar incomplete testing of simple cycle Units 8A and 8B (that now comprise part of Unit 8).

Additional Applicable Requirements

No changes were requested by the applicant with respect to the incorporation of new applicable requirements. However, the Department proposes to incorporate in this permit the recent promulgation or modifications of Federal regulations related to combustion turbines.

40CFR60, Subpart GG. The Department is clarifying the applicability of 40CFR Part60, Subpart GG – Standards of Performance for Stationary Gas Turbines. In the previous permits, adherence to the requirements of the determinations of Best Available Control Technology under the various PSD permits issued to the facility would insure compliance with Subpart GG. However, the Subpart GG provisions are clearly applicable requirements that must be included in the Title V Operation Permit. Additionally, the most recent version of Subpart GG issued on July 8, 2004 clarifies compliance methods for modern combustion turbines compared with those in existence at the time the original rule was promulgated (1977). These requirements are added as new Appendix GG (part of the permit).

40CFR63, Subpart YYYY. This subpart is the MACT for combustion turbines. By electronic communication dated October 26, 2004, the Department previously determined that the combustion turbines that comprise Combined Cycle Unit 8 qualify as existing units for purposes of the 40CFR63, Subpart YYYY. Existing combustion turbines are not required to meet the notification requirements or the emission limitations of Subpart YYYY.

40CFR63, Subparts DDDDD and ZZZZ. The Department includes these subparts since there are emission units at this facility subject to 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, or Institutional Boilers or Process Heaters and 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), adopted by reference in Rule 62-204.800(11), F.A.C. These requirements are added as new Appendices DDDDD and ZZZZ (part of the permit).



Florida Department of Environmental Protection

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FINAL Permit Revision No. 0850001-017-AV**Facility ID No. 0850001****SIC Nos.: 49, 4911****Project: Title V Air Operation Permit Revision**

The purpose of this permit is to revise the Title V Air Operation Permit No. 0850001-013-AV by incorporating the "4 on 1" new 1,150 MW combined cycle gas turbines system, identified as Unit 8. This facility is located 7 miles North of Indiantown on State Road 710, Indiantown, Martin County; UTM Coordinates: Zone 17, 542.68 km East and 2992.65 km North; Latitude: 27° 03' 25" North and Longitude: 80° 33' 55" West.

This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit revision.

Referenced attachments made a part of this permit revision:

Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix U-1, List of Unregulated Emissions Units and/or Activities
APPENDIX TV-6, TITLE V CONDITIONS (version dated 02/12/02)
APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/27/96)
Phase II Acid Rain Part Renewal Application received July 3, 2003
NSPS Custom Fuel Monitoring Schedule dated October 14, 1997
Appendix CP-1, Compliance Plan dated August 29, 2003 (updated August 21, 2006)
Appendix A, NSPS Subpart A, General Provisions
Appendix A-1, NESHAP Subpart A, General Provisions
Appendix Da, NSPS Subpart Da Requirements for Duct Burners
Appendix GG, NSPS Subpart GG Requirements for Gas Turbines
Appendix SC, Standard Conditions
Appendix BD, Best Available Control Technology Determination
Appendix Dc: NSPS Requirements for Small Steam Generating Units, 40 CFR 60, Subpart Dc
Appendix DDDDD: NESHAP Subpart DDDDD, Requirements for Industrial, Commercial, and Institutional Boilers and Process Heaters
Appendix GG: NSPS Requirements for Gas Turbines, 40 CFR 60, Subpart GG
Appendix ZZZZ: NESHAP Subpart ZZZZ, Requirements for Stationary Reciprocating Internal Combustion Engines
FIGURE I, Summary Report- Gaseous and Opacity Excess Emissions and Monitoring System Performance Report

Revision Effective Date: March 15, 2007
Renewal Effective Date: January 1, 2004
Renewal Application Due Date: July 5, 2008
Expiration Date: December 31, 2008

Joseph Kahn, Director
Division of Air Resource
Management

Florida Power & Light Company
Martin Plant
Facility ID No. **0850001**
Martin County

FINAL Title V Permit Revision No. **0850001-017-AV**
Revision to **FINAL** Title V Permit No. **0850001-013-AV**

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Title V Section

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/922-6979

Compliance Authority:
Department of Environmental Protection
Southeast District
400 North Congress Avenue
West Palm Beach, Florida 33401-5425
Telephone: 407/681-6600
Fax: 407/681-6790

FINAL Permit Revision No. 0850001-017-AV

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Section I. Facility Information

Subsection A. Facility Description

This facility consists of two oil and natural gas fired conventional fossil fuel steam electric generating stations (Units 1 and 2), two oil and natural gas fired combined cycle units (Units 3 and 4), four oil and natural gas fired combined-cycle combustion turbines (Unit 8), and associated support equipment.

Unit 1 and 2 fossil fuel fired steam electric generators, each unit consists of a boiler/steam generator which drives a single reheat turbine generator, and is equipped with low NO_x dual fuel firing burners to reduce emissions of nitrogen oxides; and, multicyclones, with fly ash reinjection, to control particulate matter emissions. The maximum capacity of each generator is 863.3 megawatts (MW).

Units 3 and 4 combined cycle combustion turbine systems (two "2-on-1" sets) consist of two General Electric Model PG7221(FA) combustion turbines (CTs) each nominally rated at 170 MW, with matched unfired heat recovery steam generator (HRSG) and a 160 MW single steam turbine-electrical generator that serves each pair of gas turbines/HRSGs systems. In addition, each system also includes inlet foggers installed at the compressor inlet to each of the CTs which reduce the turbine inlet air temperature. The temperature reduction improves the heat rate and increases power due to the cooler/denser inlet air. Nitrogen oxide emissions are controlled by using dry low NO_x combustors for natural gas with steam injection for fuel oil firing. Steam injection is also used for power augmentation. The total generating capacity of each turbine system is approximately 500 MW.

Unit 8 combined cycle combustion turbine system ("4-on-1") consists of four General Electric Model PG7241(FA), each nominally rated at 170 MW, with matched 495 MMBtu/hr gas-fired heat recovery steam generator (HRSG), and a 470 MW single steam turbine-electrical generator that serves all four gas turbines/HRSG systems. In addition, the system also includes an automated gas turbine control system, inlet air filtration systems, evaporative inlet air cooling systems, exhaust stacks that are 120 feet in height and 19 feet in diameter, and associated support equipment. Natural gas is the primary fuel, with very low sulfur distillate oil as a limited backup fuel. Emissions of CO, PM/PM₁₀, SO₂, and VOC are minimized by the efficient combustion of these clean fuels at high temperatures. Dry low-NO_x (DLN) combustion technology for gas firing and water injection for oil firing reduce NO_x emissions during simple cycle operation. A selective catalytic reduction system in combination with the other NO_x controls further reduces NO_x emissions during combined cycle operation. The total generating capacity of this turbine system is approximately 1150 MW.

This facility also includes one auxiliary boiler, four diesel generators (three unregulated), two storage oil tanks, a mechanical cooling tower, and four electrical heaters. Also included in this permit is an additional unregulated emissions unit identified as facility-wide particulate matter (PM) and volatile organic compounds (VOC) emissions.

Based on the Title V permit Revision application received on March 3, 2006, this facility is a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions

E.U. ID No.	Brief Description
-001	Fossil Fuel Fired Steam Generator No. 1
-002	Fossil Fuel Fired Steam Generator No. 2
-003	Combustion Turbine with Heat Recovery Steam Generator (CT 3A)
-004	Combustion Turbine with Heat Recovery Steam Generator (CT 3B)
-005	Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
-006	Combustion Turbine with Heat Recovery Steam Generator (CT 4B)
-007	Auxiliary Boiler (for Units -003 to -006)
-009	Diesel Generator (0.718 MW, for Units -003 to -006)
-011	Combustion Turbine with Heat Recovery Steam Generator (CT 8A)
-012	Combustion Turbine with Heat Recovery Steam Generator (CT 8B)
-014	Two distillate oil storage tanks for Unit 8 gas turbines
-017	Combustion Turbine with Heat Recovery Steam Generator (CT 8C)
-018	Combustion Turbine with Heat Recovery Steam Generator (CT 8D)
-019	Mechanical draft cooling tower for Unit 8

Unregulated Emissions Units and/or Activities

-015	Diesel Generator (for Units -001, 002, 011, 012, 017 and 018)
-016	Facility-wide Fugitive Emissions for PM and VOCs

Please reference the Permit No., Facility ID No., and appropriate Emissions Units ID Nos. on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents

The documents listed below are not a part of this permit, however they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollution Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History/ID Number Changes

Statement of Basis

These documents and all their related applications and correspondence are on file with the permitting authority:

Initial Title V Air Operation Permit 0850001-004-AV effective January 1, 1999

Title V Air Operation Permit Administrative Correction 0850001-006-AV effective July 26, 2000

Title V Air Operation Permit Revision 0850001-007-AV effective July 26, 2000

Title V Air Operation Permit Revision 0850001-012-AV effective June 20, 2003

Title V Air Operation Permit Renewal 0850001-013-AV effective January 1, 2004

Title V Air Operation Permit Revision 0850001-014-AV: Withdrawn

Title V Air Operation Permit Revision 0850001-017-AV: Pending

Section II. Facility-wide Conditions

The following conditions apply facility-wide:

1. Appendix TV-6, Title V Conditions, is a part of this permit.
{Permitting note: Appendix TV-6, Title V Conditions is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}
2. **Not federally enforceable:** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
3. Prevention of Accidental Releases (Section 112(r) of CAA).
 - (a) The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, Maryland 20703-1515
Telephone: 301/429-5018

and,
 - (b) The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C. [40 CFR 68]
4. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]
6. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions of this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
7. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility shall include the following activities. The following conditions are not federally enforceable:
 - (a) In order to perform sandblasting on fixed plant equipment, sandblasting enclosures shall be constructed and operated as necessary. Thick poly flaps shall be used over doorways to prevent sandblasting material from leaving the facility.
 - (b) Maintenance of paved areas and roads shall be performed as needed.
 - (c) Mowing of grass and care of vegetation shall be done on a regular basis.
 - (d) Access to plant property by unnecessary vehicles shall be controlled and limited. Vehicles shall be restricted to slow speeds at the plant site.

(e) Bagged chemical products (e.g., soda ash, di-, tri-, and monosodium phosphate) shall be stored in weather tight buildings until they are used.

(f) Spills of powdered chemical products shall be cleaned up as soon as practical.

[Rule 62-296.320(4)(c)2., F.A.C.; and proposed by applicant in the Title V permit renewal application received on July 3, 2003.]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4., F.A.C. (see Condition 57. of Appendix TV-6, Title V Conditions).}

8. All fugitive dust generated at this site shall be adequately controlled. This includes, but is not limited to, roadway dust. [Rule 62-296.320(4)(c)2, F.A.C.; AC43-4037 and AC43-4038]
9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]
10. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southeast District office:

Department of Environmental Protection
Southeast District
400 North Congress Avenue
West Palm Beach, Florida 33416-5425
Telephone: 407/681-6600
Fax: 407/681-6755

11. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155
Fax: 404/562-9163

12. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.
[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of Appendix TV-6, Title V Conditions).}

13. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.
[Rule 62-213.420(4), F.A.C.]

14. Compliance Plan. Appendix CP-1, Compliance Plan, is a part of this permit. Emissions units 011, 012, 017 and 018 have not, to date, been operated under the gas firing with peaking, and/or gas firing with power augmentation modes. Therefore, a compliance plan is included to cover initial testing requirements for these alternate methods of operation for emissions of CO and NO_x. Please see Specific Conditions **H.9**, **H.18** and **H.19**. [Rule 62-213.440(2), F.A.C.]

Section III. Emissions Units and Conditions.

Subsection A. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-001	Fossil Fuel Fired Steam Generator No. 1
-002	Fossil Fuel Fired Steam Generator No. 2

Both emissions units are identical in configuration and each one is an 863.3 MW maximum capacity fossil fuel fired steam generator unit, equipped with low NO_x dual fuel firing burners to reduce emissions of nitrogen oxides; and, multicyclones (mechanical dust collectors), with fly ash reinjection, to control particulate matter emissions. In addition, the units have a continuous emission monitoring system for measuring opacity, NO_x, and sulfur dioxide. Emissions Unit 001 commenced commercial operation in December 1980. Emissions Unit 002 commenced commercial operation in June 1981.

The mechanical dust collectors are excluded from compliance assurance monitoring (CAM), because they are (a) inherent process equipment contained entirely within the flue ductwork, (b) use a passive method of particulate matter separation from the flue gas stream, (c) recover unburned carbon and ash from the flue gas system, and (d) have no moving parts, no control inputs, nor any controllable parameters.

{Permitting note: The emissions units are regulated under Acid Rain, Phase II and NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators; adopted and incorporated by reference in Rule 62-204.800(7)(b)1., F.A.C.}

The following conditions apply to the emissions units listed above:

General

- A.1. Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.
[40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]

Essential Potential to Emit (PTE) Parameters

- A.2. Permitted Capacity. Each boiler's maximum heat input is 8,650 mmBtu/hr on oil and 9,040 mmBtu/hr on natural gas. When a blend of fuel oil and natural gas is burned, the heat input is prorated based on the percent heat input of each fuel.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AC43-4037 and AC43-4038]
{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.}
- A.3. Methods of Operation. Fuels. The only fuels allowed to be burned are low sulfur fuel oil containing a maximum of 0.7% sulfur content, by weight; natural gas; or, a mixture of low sulfur fuel oil containing a maximum of 1.0% sulfur content, by weight, and natural gas in a ratio that shall not exceed the sulfur dioxide emission limiting standard of 0.80 pounds per million Btu heat input. [Rule 62-213.410, F.A.C.; AC43-4037 and AC43-4038]
- A.4. Hours of Operation. The emissions units may operate continuously, i.e., 8760 hours/year.
[Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions A.5. through A.11. are based on the specified averaging time of the applicable test method.}

A.5. **Particulate Matter.** No owner or operator shall cause to be discharged into the atmosphere from each of these emissions units any gases which:

- (a) Contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel.
- (b) In addition, emissions shall not exceed 865 pounds per hour when firing 100 percent oil. [40 CFR 60.42(a)(1); AO43-170568 and AO43-170567]

A.6. [Reserved.]

A.7. **Opacity.** The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]

A.8. **Visible Emissions.** No owner or operator shall cause to be discharged into the atmosphere from each of these emissions units any gases which exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity. [40 CFR 60.42(a)(2)]

A.9. **Sulfur Dioxide.**

- (a) No owner or operator shall cause to be discharged into the atmosphere from each of these emissions units any gases which contain sulfur dioxide in excess of:
 1. 340 nanograms per joule heat input (0.80 lb per million Btu) derived from liquid fossil fuel.
 2. In addition, emissions shall not exceed 6,920 pounds per hour when firing 100 percent oil.
- (c) Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.

[40 CFR 60.43(a)(1) and (c); AO43-170568 and AO43-170567]

A.10. **Nitrogen Oxides.**

- (a) No owner or operator shall cause to be discharged into the atmosphere from each of these emissions units any gases which contain nitrogen oxides, expressed as NO₂ in excess of:
 1. 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel. In addition, emissions shall not exceed 1,808 pounds per hour.
 2. 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel. In addition, emissions shall not exceed 2,595 pounds per hour.
- (b) When different fossil fuels are burned simultaneously in any combination, the applicable standard (in lb/mmBtu) is determined by proration using the following formula:

$$PS_{NOx} = [x(.20)+y(.30)] / (x + y)$$

where:

PS_{NOx} = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in lb/mmBtu heat input derived from all fossil fuels fired;

x = is the percentage of total heat input derived from gaseous fossil fuel;

y = is the percentage of total heat input derived from liquid fossil fuel.

[40 CFR 60.44(a)(1)and (2); 40 CFR 60.44(b); AO43-170568; and AO43-170567.]

- A.11. **"On-Specification" Used Oil.** Only "on-specification" used oil generated by the Florida Power and Light Company in the production and distribution of electricity shall be fired in these emissions units. The total combined quantity allowed to be fired at these emissions units shall not exceed 1,500,000 gallons per calendar year. "On-specification" used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" used oil and shall not be fired. See Specific Conditions A.21., A.42. and A.43.

CONSTITUENT/PROPERTY*	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flashpoint	100 degrees F minimum
PCBs	less than 50 ppm

* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

[40 CFR 279.11; AO43-170568; and AO43-170567]

Excess Emissions

- A.12. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]

- A.13. In order to minimize excess emissions during startup/shutdown/malfunction the following general procedures shall be followed:

Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rules 62-210.700(1) & (2), F.A.C.; AO43-170568, Specific Condition 9.; and AO43-170567, Specific Condition 9.]

- A.14. Excess emission and monitoring system performance reports shall be submitted to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:

1. **Opacity.** Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
2. **Sulfur dioxide.** Excess emissions for affected facilities are defined as:

Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43.

3. Nitrogen oxides. Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44.

[40 CFR 60.45(g)(1), (2), & (3)]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- A.15. Opacity. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5).

[40 CFR 60.11(b)]

- A.16. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]

- A.17. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]

- A.18. Compliance.

- (b) The owner or operator shall determine compliance with the particulate matter, SO₂, and NO_x standards in 40 CFR 60.42, 60.43, and 60.44 as follows:

1. The emission rate (E) of particulate matter, SO₂, or NO_x shall be computed for each run using the following equation:

$$E = C F_d (20.9)/(20.9 - \% O_2)$$

Where,

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O₂ = oxygen concentration, percent dry basis.

F_d = factor as determined from Method 19.

2. Method 5 shall be used to determine the particulate matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems and Method 5B shall be used to determine the particulate matter concentration (C) after FGD systems.

- i. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 ± 25 °F).
 - ii. The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The O₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O₂ concentration for the run shall be the arithmetic mean of all the individual O₂ sample concentrations at each traverse point.
 - iii. If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points.
 3. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
 4. Method 6 shall be used to determine the SO₂ concentration.
 - i. The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.
 - ii. The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The O₂ sample shall be taken simultaneously with, and at the same point as, the SO₂ sample. The SO₂ emission rate shall be computed for each pair of SO₂ and O₂ samples. The SO₂ emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.
 5. Method 7 shall be used to determine the NO_x concentration.
 - i. The sampling site and location shall be the same as for the SO₂ sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.
 - ii. For each NO_x sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The sample shall be taken simultaneously with, and at the same point as, the NO_x sample.
 - iii. The NO_x emission rate shall be computed for each pair of NO_x and O₂ samples. The NO_x emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.
- (c) When combinations of fossil fuels are fired, the owner or operator (in order to compute the prorated standard as shown in 40 CFR 60.43(b) and 60.44(b)) shall determine the percentage (x or y) of the total heat input derived from each type of fuel as follows:
1. The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.
 2. ASTM Methods D 240-76 (liquid fuels), or D 1826-77 (gaseous fuels) (incorporated by reference-see 40 CFR 60.17) shall be used to determine the gross calorific values of the fuels.

3. Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate.
- (d) The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:
 1. The emission rate (E) of particulate matter, SO₂ and NO_x may be determined by using the F_c factor, provided that the following procedure is used:
 - i. The emission rate (E) shall be computed using the following equation:
$$E = C F_c (100 / \%CO_2)$$
where:
E = emission rate of pollutant, ng/J (lb/million Btu).
C = concentration of pollutant, ng/dscm (lb/dscf).
%CO₂ = carbon dioxide concentration, percent dry basis.
F_c = factor as determined in appropriate sections of Method 19.
 - ii. If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O₂ and CO₂ concentration according to the procedures in 40 CFR 60.46(b) (2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than ± 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., $F_{oa} = 0.209 (F_{da} / F_{ca})$, then the following procedure shall be followed:
 - (A) When F_o is less than 0.97 F_{oa}, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.
 - (B) When F_o is less than 0.97 F_{oa} and when the average difference ($\bar{d}$) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
 - (C) When F_o is greater than 1.03 F_{oa} and when $\bar{d}$ is positive, then E shall be decreased by that proportion over 1.03 F_{oa}, e.g., if F_o is 1.05 F_{oa}, E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
 2. For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of sections 2.1 and 2.3 of Method 5B maybe used with Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.
 3. Particulate matter and SO₂ may be determined simultaneously with the Method 5 train provided that the following changes are made:
 - i. The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.

- ii. All applicable procedures in method 8 for the determination of SO₂ including moisture) are used.
4. For Method 6, Method 6C may be used. Method 6A may also be used whenever Methods 6 and 3B data are specified to determine the SO₂ emission rate, under the conditions in 40 CFR 60.46(d)(1).
5. For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O₂ concentration (%O₂) for the emission rate correction factor.
6. For Method 3, Method 3A or 3B may be used.
7. For Method 3B, Method 3A may be used.

[40 CFR 60.46(b), (c) and (d)]

- A.19. Operating Rate During Testing. Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate at the permitted capacity. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.; AO43-170568, Specific Condition 1.; and AO43-170567, Specific Condition 1.]

- A.20. All compliance tests shall be performed using reference test methods as given in 40 CFR 60, Appendix A, as adopted by reference in Rule 62-297.400, F.A.C. Any deviations from the test methodology in order to facilitate "representative" testing shall be approved by the Department pursuant to Rule 62-297.620, F.A.C., prior to conducting the tests.

[40 CFR 60, Appendix A; Rule 62-297.400, F.A.C.; Rule 62-297.620, F.A.C.; AO43-170568, Specific Condition 3.; and AO43-170567, Specific Condition 3.]

- A.21. Compliance with the "on-specification" used oil requirements will be determined from a sample collected from each batch delivered for firing. See Specific Conditions A.11., A.42., and A.43. [Rules 62-4.070 and 62-213.440; and 40 CFR 279.]

- A.22. Testing While Injecting Additives. The owner or operator shall conduct emission tests while injecting additives consistent with normal operating practices.

[Rule 62-213.440, F.A.C.; and applicant agreement with EPA on March 3, 1998.]

Continuous Monitoring Requirements

- A.23. The permittee has installed and shall continue to calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, and carbon dioxide emissions. [40 CFR 60.45(a)]

- A.24. For the purposes of 40 CFR 60.13, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987. [40 CFR 60.13(a)]

- A.25. If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act. [40 CFR 60.13(c)]
- A.26. The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance. [40 CFR 60.11(e)(5)]
- A.27. Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
- (1) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

[40 CFR 60.13(d)(1) and (2)]

A.28. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

- (1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- (2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)(1) and (2)]

A.29. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

[40 CFR 60.13(f)]

A.30. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system. [40 CFR 60.13(g)]

A.31. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]

A.32. For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:

- (1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in 40 CFR 60.46(d).

- (2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.
- (3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

Fossil fuel	Span value for sulfur dioxide (ppm)	Span value for nitrogen oxides (ppm)
Gas	{1}	500
Liquid	1,000	500
Combinations	1,000y	500(x+y)

{1} Not applicable.

where:

x = the fraction of total heat input derived from gaseous fossil fuel, and

y = the fraction of total heat input derived from liquid fossil fuel.

- (4) All span values computed under 40 CFR 60.45(c)(3) for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.
- (5) For a fossil fuel-fired steam generator that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Administrator's approval.

[40 CFR 60.45(c)]

A.33. For any continuous monitoring system installed under 40 CFR 60.45(a), the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/million Btu):

- (1) When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

$$E = CF[20.9/(20.9 - \text{percent O}_2)]$$

where:

E, C, F, and % O₂ are determined under 40 CFR 60.45(f).

- (2) When a continuous monitoring system for measuring carbon dioxide is selected, the measurement of the pollutant concentration and carbon dioxide concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure shall be used:

$$E = CF_c [100/\text{percent CO}_2]$$

where:

E, C, F_c and %CO₂ are determined under 40 CFR 60.45(f).

[40 CFR 60.45(e)]

A.34. The values used in the equations under 40 CFR 60.45(e) (1) and (2) are derived as follows:

- (1) E = pollutant emissions, ng/J (lb/million Btu).

- (2) C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15×10^4 M ng/dscm per ppm (2.59×10^{-9} M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for sulfur dioxide and 46.01 for nitrogen oxides.
- (3) % O₂, %CO₂ = oxygen or carbon dioxide volume (expressed as percent), determined with equipment specified under 40 CFR 60.45(a).
- (4) F, F_c = a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F_c), respectively. Values of F and F_c are given as follows:
 - iii. For liquid fossil fuels including crude, residual, and distillate oils, $F = 2.476 \times 10^{-7}$ dscm/J (9,220 dscf/million Btu) and $F_c = 0.384 \times 10^{-7}$ scm CO₂ /J (1,430 scf CO₂ /million Btu).
 - iv. For gaseous fossil fuels, $F = 2.347 \times 10^{-7}$ dscm/J (8,740 dscf/million Btu). For natural gas, propane, and butane fuels, $F_c = 0.279 \times 10^{-7}$ scm CO₂ /J (1,040 scf CO₂ /million Btu) for natural gas, 0.322×10^{-7} scm CO₂ /J (1,200 scf CO₂ /million Btu) for propane, and 0.338×10^{-7} scm CO₂ /J (1,260 scf CO₂ /million Btu) for butane.
- (5) The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/million Btu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or F_c factor (scm CO₂ /J, or scf CO₂ /million Btu) on either basis in lieu of the F or F_c factors specified in 40 CFR 60.45(f)(4):

SI Units:

$$F = 10^{-6} \frac{[227.2 (\text{pct. H}) + 95.5 (\text{pct. C}) + 35.6 (\text{pct. S}) + 8.7 (\text{pct. N}) - 28.7 (\text{pct. O})]}{\text{GCV}}$$

$$F_c = \frac{2.0 \times 10^{-5} (\text{pct. C})}{\text{GCV}}$$

English Units:

$$F = 10^6 \frac{3.64(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O)}{\text{GCV}}$$

SI Units:

$$F_c = \frac{20.0(\%C)}{\text{GCV}}$$

English Units:

$$F_c = \frac{321 \times 10^3 (\%C)}{\text{GCV}}$$

- i. H, C, S, N, and O are content by weight of hydrogen, carbon, sulfur, nitrogen, and oxygen (expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, or computed from results using ASTM method D1137-53(75), D1945-64(76), or D1946-77 (gaseous fuels) as applicable. (These three methods are incorporated by reference-see 40 CFR 60.17.)
- ii. GCV is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test method D1826-77 for gaseous fuels as applicable. (This method is incorporated by reference-see 40 CFR 60.17.)
- iii. For affected facilities which fire both fossil fuels and nonfossil fuels, the F or F_c value shall be subject to the Administrator's approval.

- (6) For affected facilities firing combinations of fossil fuels, the F or F_c factors determined by paragraphs 40 CFR 60.45(f)(4) or (f)(5) shall be prorated in accordance with the applicable formula as follows:

$$F = \sum_{i=1}^n X_i F_i \quad \text{or} \quad F_c = \sum_{i=1}^n X_i (F_c)_i$$

where:

X_i = the fraction of total heat input derived from each type of fuel (e.g. natural gas, etc.)

F_i or $(F_c)_i$ = the applicable F or F_c factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section.

n = the number of fuels being burned in combination.

[40 CFR 60.45(f)]

- A.35. Operation and maintenance of continuous emissions monitoring (CEM) systems shall be carried out according to the requirements of 40 CFR 60; reports thereof shall be submitted to the Department's Southeast District Office within thirty (30) days following each calendar quarter and will include information required under 40 CFR 60.7(c). The Department reserves the right to modify the format of the reports. For any periods of excess emissions, as defined in 40 CFR 60.45(g), the reports shall specify the cause and corrective actions taken as well as the specific operational conditions existing (i.e., steady-state output, load charging rate; sootblowing, limiting, or air preheated steam cleaning sequences), during the period of excess emissions.
[AO43-170568, Specific Condition No. 4; AO43-170567, Specific Condition No. 4]

Recordkeeping and Reporting Requirements

- A.36. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

[40 CFR 60.7(a)(4)]

- A.37. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]
- A.38. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of

the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)(1), (2), (3), and (4)]

A.39. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

- (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
- (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}

[40 CFR 60.7(d)(1) and (2)]

A.40. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

- i. For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
- ii. The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
- iii. The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)(1)]

- A.41. The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.
[40 CFR 60.7(f); Rule 62-213.440(1)(b)2.b., F.A.C.]
- A.42. Records shall be kept of each delivery of "on-specification" used oil with a statement of the origin of the used oil and the quantity delivered/stored for firing. In addition, monthly records shall be kept of the quantity of "on-specification" used oil fired in these emissions units. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request. See Specific Conditions A.11., A.21., and A.43.
[Rule 62-213.440(1)(b)2.b., F.A.C.; and 40 CFR 279.61 and 761.20(e)]
- A.43. The permittee shall include in the "Annual Operating Report for Air Pollutant Emitting Facility" a summary of the "on-specification" used oil analyses for the calendar year and a statement of the total quantity of "on-specification" used oil fired in Fossil Fuel Fired Steam Generators Nos. 1 and 2 during the calendar year. See Specific Conditions A.11., A.21., and A.42.
Rule 62-213.440(1)(b)2.b., F.A.C.]
- A.44. Until such time when the Environmental Protection Agency (EPA) promulgates final rules regarding fuel sampling and test methods, the Department will accept the current fuel sampling and analysis program, provided that daily as fired fuel oil samples are composited and analyzed for sulfur content on a monthly basis to demonstrate compliance with fuel oil sulfur content limits.

Quarterly reports containing the results of the monthly fuel oil sampling and analysis shall be submitted to the Department no later than thirty (30) days after the end of each quarter.

The permittee shall be allowed 90 days after promulgation of fuel sampling and analysis methods to implement an EPA approved method of monitoring sulfur dioxide emissions either by fuel sampling and analysis methods or continuous in-stack monitoring or other methods as approved under the provisions of 40 CFR 60.45.

[AO43-170568, Specific Condition No. 5; and AO43-170567, Specific Condition No. 5.]

- A.45. COMS for Periodic Monitoring. The owner or operator is required to install continuous opacity monitoring systems (COMS) pursuant to 40 CFR Part 75. The owner or operator shall maintain and operate COMS and shall make and maintain records of opacity measured by the COMS, for purposes of periodic monitoring.

[Rule 62-213.440, F.A.C.; and applicant agreement with EPA on March 3, 1998.]

Miscellaneous

- A.46. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]

- A.47. The emissions units are also subject to the conditions contained in **Subsection E. Common Conditions**.

- A.48. Please be advised that the Department does not condone nor authorize the permittee to by-pass waste materials from either air or wastewater facilities at any time that would result in a violation of the rules and regulations of the Department. In case of breakdown or lack of proper functioning of the facility causing or likely to cause discharge of improperly treated sewage or air emissions, it shall be the duty of the owner of the facility to promptly notify the Department. In addition to notifying this Department, the permittee shall notify the local County Health Officer. The owner of the impaired facility causing the violation shall be responsible for any and all damages which may result. If violations of State standards occur, enforcement actions may be initiated.

[AC43-4037; and AC43-4038]

Subsection B. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-003	Combustion Turbine with Heat Recovery Steam Generator (CT 3A)
-004	Combustion Turbine with Heat Recovery Steam Generator (CT 3B)
-005	Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
-006	Combustion Turbine with Heat Recovery Steam Generator (CT 4B)

All four combined cycle units are identical in configuration. Nitrogen oxide emissions are controlled by using dry low NO_x combustors for natural gas with steam injection for fuel oil firing. Steam injection is also used for power augmentation. Inlet foggers installed at the compressor inlet to each of the four CTs reduce the turbine inlet air temperature. The temperature reduction improves the heat rate and increases power due to the cooler/denser inlet air. Duct modules suitable for future installation of selective catalytic reduction (SCR) equipment have been installed on each combined cycle generating unit. Based on information contained in the initial Title V Permit Application, and recent correspondence from the Applicant, only natural gas has been fired in the units to date. Units 003 and 004 commenced commercial operation in February 1994. Units 005 and 006 commenced commercial operation in April 1994.

Compliance assurance monitoring (CAM) is not applicable to these combustion turbines since dry low-NO_x combustors when firing natural gas are not considered a pollution control device under 40 CFR 64. When firing distillate fuel oil, the underlying emissions limits are based on CEMS and, therefore, the requirements of CAM are not required.

{Permitting Note: The emissions units are regulated under Acid Rain, Phase II and NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines; adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C.; PSD-FL-146, Prevention of Significant Deterioration (PSD), in Rule 62-212.400, F.A.C.; and Best Available Control Technology (BACT), in Rule 62-212.410, F.A.C.}

The following conditions apply to the emissions units listed above:

General

- B.1. Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee. [40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]
- B.2. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]

Essential Potential to Emit (PTE) Parameters

- B.3. Permitted Capacity. The maximum heat input to each Combustion Turbine (CT) shall neither exceed 1966 mmBtu/hr while firing natural gas, nor 1846 mmBtu/hr while firing fuel oil @ 40 degrees F. These heat input limitations are subject to change. Any changes shall be provided at least 90 days before commercial operation for each fuel available to the site which a unit is capable of firing, at which time this condition may be modified to reflect those parameters. Each combined cycle's fuel consumption shall be continuously determined and recorded.

{Permitting Note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.}

Operation During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. Permitted capacity and operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.

If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

If tested at less than capacity, the entire heat input versus inlet temperature curves will be adjusted by the increment equal to the difference between the design heat input value and 110 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.

[Rule 62-4.160(2), Rule 62-297.310(2), and Rule 62-210.200(PTE), F.A.C.; PSD-FL-146 and PSD-FL-146A (0850001-002 and 0850001-003-AC issued 9/6/96); Specific Condition No. 1. Rescission of Guidance DARM-EM-05; and Applicant Request dated April 5, 2006, Permit No. 0850001-016-AC.]

B.4. Methods of Operation.

(a) Fuels. Only natural gas or No. 2 fuel oil shall be fired in the CTs.

(b) Inlet Foggers. Operation of the foggers on each unit may not exceed the following limits: 181,661 degree F-hours in aggregate firing natural gas fuel if no distillate fuel is fired. If distillate oil is fired in any of the CTs during a calendar year, the allowable degree F-hours for natural gas shall be decreased by 2.77 degree F-hours for every hour operated on distillate oil fuel. No CT may exceed 4,000 degree F-hours per year firing distillate oil fuel.

{Permitting Note: The permittee shall monitor both the hours of operation for the inlet foggers and the degrees of cooling afforded by the inlet foggers. Computation of the degree-hour will be performed as follows:

Degree-hours = # hours inlet fogger operating time X degrees F of cooling

Degrees of Cooling shall be calculated by subtracting the fogged compressor inlet air temperature from the unfogged compressor inlet temperature (upstream of the fogger). The above calculation shall be performed for each hour of fogger operation. Calculation records shall be maintained on the plant site and made available for inspection upon request.}

The temperature drop across the inlet foggers shall be monitored whenever water is injected at the foggers and hourly average temperature drops shall be calculated and recorded along with hours of operation automatically using a computer system. The product of each hour of fogger operation and the average temperature depression for that hour (degree F-hours) shall be summed for each calendar year and shall be submitted to the DEP SE District Office with the Annual Operating Report. The temperature monitoring system shall be calibrated annually (see Specific Condition **B.52.**).

[PSD-FL-146, Specific Condition No. 3; PSD-FL-146(G); and 0850001-005-AC.]

B.5. Hours of Operation. The emissions units may operate continuously, i.e., 8760 hours/year/CT.
[Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions B.6. through B.8. are based on the specified averaging time of the applicable test method.}

B.6. The maximum allowable emissions from each CT, in accordance with the BACT determination, shall not exceed the following, at 40 degrees F, except during periods of startup and shutdown:

Pollutant	Fuel	Emission Limitations ^d		
		Concentration	lb/hr/CT	TPY/CT ^a
NO _x	Gas	25 ppmvd @ 15% O ₂	177	3108 (combined gas and oil total)
	Oil	65 ppmvd @ 15% O ₂	461	
VOC ^b	Gas	1.6 ppmvd	3	57 (combined gas and oil total)
	Oil	6 ppmvd	11.0	
CO	Gas	30 ppmvd	94.3	871 (combined gas and oil total)
	Oil	33 ppmvd	105.8	
PM/PM ₁₀	Gas		18	100 (combined gas and oil total)
	Oil		60.6	
Pb	Gas		negligible	0.015 (combined gas and oil total)
	Oil		0.015	
SO ₂	Gas		91.5	568 (combined gas and oil total)
	Oil ^c		920	

^a Tons per year (TPY) emission limits listed for natural gas and oil combined apply as an emissions cap based on limiting oil firing to an annual aggregate of 2,000 hours for the 4 CT's, with compliance to be demonstrated in annual operation reports.

^b Exclusive of background concentrations.

^c Sulfur dioxide emissions based on a maximum of 0.5 percent sulfur content, by weight, in oil for hourly emissions and an average sulfur content of 0.3 percent, by weight, for annual emissions. These sulfur content limitations are subject to change based on the analysis required in PSD Specific Condition No. 12. (See specific condition B.49.)

^d These limitations for Units 5 and 6 shall not be binding for subsequent BACT determinations.

[PSD-FL-146, Specific Condition No. 4.]

B.7. The following emissions, determined by BACT, are tabulated for PSD and inventory purposes:

Pollutant	Fuel	Maximum Allowable Emissions (@40 ° F)	
		lb/hr/CT	TPY/CT ^a
H ₂ SO ₄ Acid Mist ^b	Gas	11.2	70 (combined gas and oil total)
	Oil	113	
Mercury	Gas	0.021	0.34 (combined gas and oil total)
	Oil	0.0052	
Fluoride	Oil	0.055	0.055
Beryllium	Oil	0.004	0.004

^a Tons per year (TPY) emission limits for natural gas and oil combined apply as an emissions cap based on limiting oil firing to an annual aggregate of 2,000 hours for the 4 CT's, with compliance to be demonstrated in annual operation reports.

^b Sulfuric acid mist emissions assume a maximum of 0.5 percent sulfur content, by weight, in fuel oil for hourly emissions and an average sulfur content of 0.3 percent, by weight, for annual emissions.

[PSD-FL-146, Specific Condition No. 5.]

B.8. Opacity. Visible emissions shall neither exceed 10% opacity while burning natural gas, nor 20% opacity while burning distillate oil. [PSD-FL-146, Specific Condition No. 8.]

B.9. Opacity. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]

B.10. Opacity. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]

B.11. Nitrogen Oxides. Nitrogen oxide emissions from each gas turbine/heat recovery steam generator unit shall be controlled by using dry low NOx combustors for natural gas with steam injection for fuel oil firing. The permittee has installed duct modules suitable for future installation of SCR equipment on each combined cycle generating unit. [PSD-FL-146, Specific Condition No. 9.]

Excess Emissions

B.12. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

B.13. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]

B.14. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

B.15. The excess emissions authorized under Rule 62-210.700(1), F.A.C., shall be extended an additional two hours (four hours total) for a cold steam turbine start for the first CT of a unit. The second CT of each unit shall comply with established emission limits in accordance with Rule 62-210.700(1), F.A.C. [PSD-FL-146, Specific Condition No. 4.]

B.16. Reserved.

Monitoring of Operations

B.17. At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]

B.18. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO_x emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ± 5.0 percent and shall be approved by the Administrator. This specific condition does not apply if only natural gas is fired in the turbine. [40 CFR 60.334(a)]

B.19. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

- (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
- (2) If the turbine is supplied its fuel without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b).

[40 CFR 60.334(b)(1) and (2)]

B.20. The Martin Plant facility requested approval for and was granted approval to utilize a customized fuel monitoring schedule for natural gas firing, pursuant to 40 CFR 60.334(b). See specific condition **B.19**. The schedule is as follows:

Custom Fuel Monitoring Schedule for Natural Gas (NG)

- (1) Monitoring of fuel nitrogen content shall not be required if NG is the only fuel being fired in the gas turbines.
- (2) Sulfur Monitoring
 - a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are ASTM D1072-80, ASTM D3031-81, ASTM D3246-81, and ASTM D4084-82, as referenced in 40 CFR 60.335(b)(2), or the latest edition(s).
 - b. This custom fuel monitoring schedule shall become effective on the date this permit becomes valid. Effective the date of this custom schedule, sulfur monitoring shall be

- conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters. If monitoring data is provided by the applicant which demonstrates consistent compliance with the requirements herein the applicant may begin monitoring as per the requirements of 2(c).
- c. c. If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.
 - d. d. Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the Department of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- (3) If there is a change in fuel supply, the owner or operator must notify the Department of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- (4) Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of five years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

[PSD-FL-146; and NSPS Custom Fuel Monitoring Schedule dated 10/14/97.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- B.21. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired. This specific condition does **not apply** if only natural gas is fired in the turbine. [40 CFR 60.335(a)]
- B.22. The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted NO_x standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. This specific condition does **not apply** if only natural gas is fired in the turbine. [40 CFR 60.335(c)(2)]
- B.23. The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 as follows:
- U.S. EPA. Method 20 or Method 7 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO_x emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2). See Specific Condition **B.20.** that describes the approved Custom Fuel Monitoring Schedule for Natural Gas for this facility. After initial testing, subsequent annual NO_x compliance tests for NO_x limits that are more stringent than 40 CFR 60, Subpart GG, shall not require an ISO correction or testing at four load points; rather, the testing shall be done at capacity (see Specific Condition **B.3.**). However, when testing shows that NO_x

emissions exceed the standard when operating at capacity, the permittee shall recalibrate the NO_x emission control system using emission testing at four load points.

[40 CFR 60.335(c)(3); and applicant request letter dated July 29, 1998]

B.24. The owner or operator shall determine compliance with the sulfur content standard of 0.5 percent, by weight, as follows: ASTM D 2880-96 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92 shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator. See specific condition B.20 that describes the approved Custom Fuel Monitoring Schedule for Natural Gas for this facility.

[40 CFR 60.335(d)]

B.25. To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in 40 CFR 60.335 (a) and 40 CFR 60.335(d) of 40 CFR 60.335 to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. See Specific Condition B.20 that describes the approved Custom Fuel Monitoring Schedule for Natural Gas for this facility. [40 CFR 60.335(e)]

B.26. The owner or operator shall provide, or cause to be provided, stack sampling and performance testing facilities as follows:

- (1) Sampling ports adequate for test methods applicable to such facilities.
- (2) Safe sampling platform(s).
- (3) Safe access to sampling platform(s).
- (4) Utilities for sampling and testing equipment.

[40 CFR 60.8; PSD-FL-146, Specific Condition No. 21]

B.27. Compliance Test Methods: Tests shall be conducted using EPA reference methods, or equivalent, in accordance with 40 CFR 60 Appendix A.

Pollutant	EPA Reference Method	Initial testing		Annual testing	
		Gas	Oil	Gas	Oil
Particulate Matter	5 or 17		X		X
Sulfuric Acid Mist	8		X		
Visible Emissions	9	X	X	X	X
Carbon Monoxide	10	X	X	X	X
Nitrogen Oxides	7E, 20	X	X	X	X
Volatile Organic Compounds	18, 25 or 25A**	X	X		
	Test Method				
Lead	EMTIC Test Method, or Method 7090, or 7091*		X		
Beryllium	EMTIC Test Method, or Method 104, or Method 7090, or 7091*		X		
Sulfur content	ASTM D 2880-96		X		X
	ASTM D 1072-90(94) E-1, ASTM D 3031-81(86), ASTM D 4084-94, or ASTM D 3246-92	X		X	
Mercury	40 CFR 61, Appendix B EPA Method 101*	X	X		

- * Method 3040 sample extraction shall be used as described in the EPA solid waste regulations SW 846.
- ** EPA Method 18 may be conducted to account for the non-regulated methane fraction of the measured VOC emissions.

The stack test for each turbine shall be performed within 10% of the maximum heat rate input for the tested operating temperature. See Specific Condition B.3 for utilization of ambient temperature versus heat input curves during compliance testing.

Initial (I) compliance tests shall be performed on each Combustion Turbine using both fuels (based on information provided by the applicant, initial testing using distillate oil has not been done). It is not necessary to plan the firing of a fuel solely to complete the initial compliance test; instead, the initial test may be postponed until such time as the untested fuel is ready for service.

Annual (A) compliance tests shall be conducted for each combustion turbine to demonstrate compliance with the permitted emissions standards for normal gas firing, gas firing with power augmentation, and backup distillate oil firing. CO and NO_x performance tests shall be conducted concurrently. If conducted at permitted capacity, NO_x emissions data collected during the annual NO_x continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the required annual performance test. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th).

For each combustion turbine that fires distillate oil for less than 400 hours during the previous federal fiscal year, the annual performance tests when firing distillate oil for the current federal fiscal year of operation are not required. Combustion turbines firing more than 400 hours on oil will also be required to demonstrate compliance with PM standards.

For each combustion turbine that operates with power augmentation for less than 400 hours during the previous federal fiscal year, the annual performance tests when operating with power augmentation for the current federal fiscal year of operation are not required. During power augmentation each unit shall comply with the emissions limits stated in Specific Condition B.6. [40 CFR Appendix A; Rule 62-204.800, F.A.C. and Rule 62-297.310(7)(a)4., F.A.C.; PSD-FL-146, Specific Condition No. 10; and applicant request letters dated July 28, 1998 and April 5, 2006.]

- B.28. The average sulfur content of the light distillate oil shall not exceed 0.3%, by weight, during any consecutive 12-month period. The maximum sulfur content of the light distillate fuel oil shall not exceed 0.5%, by weight. The 12-month average sulfur content shall be calculated as a weighted average based upon the sulfur content of the oil and the amount burned on a daily basis. Compliance shall be demonstrated in accordance with the requirements of 40 CFR 60.334 by testing for sulfur content, for nitrogen content, and for heating value of oil storage tanks once per day when firing oil using ASTM D 2880-96. [Rule 62-213.440, F.A.C., applicant agreement with EPA on March 3, 1998, and PSD-FL-146, Specific Condition No. 11]

- B.29. Opacity. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). [40 CFR 60.11(b)]

- B.30. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup,

shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]

Continuous Monitoring Requirements

- B.31. Continuous emissions monitoring shall be installed, operated, and maintained in accordance with 40 CFR 75 for each combined cycle unit to monitor nitrogen oxides.
- (a) Each continuous emissions monitoring system (CEMS) shall meet performance specifications of 40 CFR 75, Appendices A, B, and F.
 - (b) CEMS data shall be recorded and reported in accordance with 40 CFR 75 and 40 CFR 60.7. The excess emissions report shall include periods of startup, shutdown, and malfunction and shall be based on NO_x data corrected to 15 % O₂ and 40 degrees F.
 - (c) A malfunction means any sudden and unavoidable failure of air pollution equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.
 - (d) For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration which exceeds the applicable emission limits in specific condition **B.6**. See specific condition **B.39**.
- [PSD-FL-146, Specific Condition No. 13]
- B.32. For the purposes of 40 CFR 60.13, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987. [40 CFR 60.13(a)]
- B.33. If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act. [40 CFR 60.13(c)]
- B.34. The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity

determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance. [40 CFR 60.11(e)(5)]

- B.35. Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

- (1) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

[40 CFR 60.13(d)(1) and (2)]

- B.36. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

- (1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- (2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)(1) and (2)]

- B.37. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

[40 CFR 60.13(f)]

- B.38. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent

from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system. [40 CFR 60.13(g)]

- B.39. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]

Recordkeeping and Reporting Requirements

- B.40. To determine compliance with the oil firing heat input limitation, the permittee shall maintain daily records of fuel oil consumption and hourly usage for each turbine and heating value for each fuel. All records shall be maintained for a minimum of five (5) years after the date of each record and shall be made available to representatives of the Department upon request.
[PSD-FL-146, Specific Condition No. 14]
- B.41. The permittee shall have required sampling tests of the emissions performed within 60 after achieving the maximum turbine firing rate, but not later than 180 days from the start of operations. Thirty (30) days notice prior to the initial sampling test and fifteen (15) days notice before subsequent annual testing shall be provided to the Southeast District Office. Written reports of the tests shall be submitted to the Southeast District Office within 45 days of test completion.
[PSD-FL-146, Specific Condition No. 17]
- B.42. Quarterly excess emission reports, in accordance with the July 1, 1996, version of 40 CFR 60.7(c) and 60.334(c), shall be submitted to the Department's Southeast District Office.

Annual reports shall be submitted to the District office in accordance with Rule 62-2.700(7), F.A.C.

[PSD-FL-146, Specific Condition No. 19]
- B.43. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
- Nitrogen oxides.* Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

[Rule 62-296.800, F.A.C.; 40 CFR 60.334(c)(1)]

B.44. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

[40 CFR 60.7(a)(4)]

B.45. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]

B.46. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)(1), (2), (3), and (4)]

B.47. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

- (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

- (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}

[40 CFR 60.7(d)(1) and (2)]

B.48. Reporting Frequency Reduction.

- (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
- For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
 - The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
 - The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the non-complying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)(1)]

- B.49. The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.
[40 CFR 60.7(f); Rule 62-213.440(1)(b)2.b., F.A.C.]

Miscellaneous

- B.50. In the supplemental application for approval of Phase II of the Project, the applicant shall include a cumulative air quality impact analysis and a PSD increment consumption analysis for the Everglades National Park Class I area. [PSD-FL-146, Specific Condition No. 12]
- B.51. The emissions units are also subject to the conditions contained in **Subsection E. Common Conditions**.
- B.52. Temperature Monitoring System Calibration. The temperature monitoring system shall be calibrated annually from 10 percent below to 10 percent above its normal operation range by the procedures recommended by the manufacturer. The temperature monitoring system generally consists of a thermocouple, a temperature indicator, and a recorder. The purpose of the calibration is to provide reasonable assurance that the temperature being recorded by the monitoring system is the actual temperature of the inlet air.

If the manufacturer has provided recommended calibration procedures, those procedures should be followed. If the manufacturer has not provided recommended calibration procedures, the following general calibration procedures should be used:

THERMOCOUPLE: The calibration points should bracket the temperature range over which the thermocouple is to be used. The thermocouple should be calibrated against a NIST (National Institute of Standards and Technology) traceable reference thermocouple. The thermocouple may be calibrated using ASTM E 220, Method B. Alternatively, the thermocouple can be replaced each year with a new thermocouple certified by the manufacturer to be accurate to within 0.9% of the temperatures being measured. A certificate of conformance from the manufacturer (certifying that the new thermocouple conforms to published specifications) will satisfy the annual calibration requirements.

TEMPERATURE INDICATOR: The instrument, which converts voltage output from the thermocouple to a temperature reading, can be calibrated by applying known voltages (mv), and reading the reported temperatures. The voltage values should correspond to the voltages generated by the thermocouple for temperatures over a range from 10% below to 10% above the inlet air temperatures to be used. The reference voltage supply should be accurate to within 0.1% of the reading.

RECORDER: The strip chart recorder or digital data acquisition system should be connected to the temperature indicator during its calibration and can be calibrated at the same time. The recorder should be adjusted to reproduce the readings of the temperature indicator.

The temperature monitoring system calibration error should not exceed 1% of the temperature reading.

[PSD-FL-146(G); 0850001-005-AC; and, Rule 62-297.310(5)(b)]

Subsection C. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
-007	Auxiliary Boiler

This emissions unit is used to produce steam to actuate the steam seals on the steam turbine components of the combined-cycle units (Emissions Units 003, 004, 005, and 006) during cold starts when steam is not otherwise available for this purpose. Initial startup of Emissions Unit 007 was on July 15, 1993.

Because the unit has no installed pollution control devices, the unit is not subject to compliance assurance monitoring (CAM).

{Permitting Notes: The emissions unit is regulated under NSPS - 40 CFR 60.40c, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units; adopted and incorporated by reference in Rule 62-204.800(8), F.A.C.; and 40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, or Institutional Boilers or Process Heaters, adopted by reference in Rule 62-204.800(11), F.A.C., Rule 212.400, F.A.C.; Prevention of Significant Deterioration (PSD), Best Available Control Technology (BACT); and Air Construction Permits PSD-FL-146}.

The following conditions apply to the emissions unit listed above:

General

- C.1. Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.
[40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]
- C.2. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]

Essential Potential to Emit (PTE) Parameters

- C.3. Hours of Operation. The auxiliary boiler shall operate only during startup and shutdown of the combined-cycle units, and for periodic maintenance testing.
[Rule 62-210.200(PTE), F.A.C.; PSD-FL-146, revised 7/19/93]
- C.4. Fuels. Only natural gas or No. 2 light distillate fuel oil shall be fired in the auxiliary boiler. Based on the Title V Permit Application, the unit is currently only capable of firing natural gas.
[PSD-FL-146, Specific Condition No. 3]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions C.5. through C.10. are based on the specified averaging time of the applicable test method.}

- C.5. Visible Emissions. Visible emissions shall not exceed twenty (20) percent opacity (6-minute average), except for one six-minute period per hour of not more than twenty seven (27) percent

opacity. This standard applies at all times, except during periods of startup, shutdown, or malfunction. [40 CFR 60.43c(c) & (d)]

- C.6. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]
- C.7. Opacity. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- C.8. Sulfur Dioxide. Sulfur dioxide emissions limitations for the auxiliary steam boiler are established by firing natural gas or limiting the light distillate fuel oil's average sulfur content to 0.3%, by weight, during any consecutive 12-month period. The 12-month average sulfur content shall be calculated as a weighted average based upon the sulfur content of the oil and the amount burned on a daily basis.
[Rule 62-213.440, F.A.C., applicant agreement with EPA on March 3, 1998, and PSD-FL-146, revised 7/19/93]
- C.9. For units listed under 40 CFR 60.42c(h)(1), compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f)(1), as applicable.
- (1) Distillate oil-fired units with heat input capacities between 2.9 and 29 MW (10 and 100 million Btu/hr).
[40 CFR 60.42c(h)(1)]
- C.10. Nitrogen Oxides. NOx emissions for the auxiliary steam boiler shall not exceed 0.3 lb/mmBtu for natural gas firing or oil firing. [PSD-FL-146, revised 7/19/93]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- C.11. Compliance and performance test methods and procedures for sulfur dioxide. Compliance with the percent reduction requirements and SO₂ emission limits under 40 CFR 60.42c is based on the average percent reduction and the average SO₂ emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO₂ emission rate are calculated to show compliance with the standard. **Note:** No annual testing is required if operational hours are less than 400 hours per year on oil. However, testing is required for permit renewal purposes, if the unit operated on oil during the previous years. [40 CFR 60.44c(c); and, Rule 62-297.310(7), F.A.C.]
- C.12. If only oil is combusted in a unit, the procedures in Method 19 are used to determine the hourly SO₂ emission rate (E_h) and the 30-day average SO₂ emission rate (E_a). The hourly averages used to compute the 30-day averages are obtained from the continuous emission monitoring system (CEMS). Method 19 shall be used to calculate E_a when using daily fuel sampling or Method 6B.
- E_h is defined as the hourly average pollutant rate, in ng/J (lb/million Btu heat input), and
- E_a , defined as the average pollutant rate for the specified performance test period, in ng/J (lb/million Btu heat input), is computed using the following equation:

$$E_a = (1 / H) \sum_{j=1}^n E_{hj}$$

Where

H= total number of operating hours for which pollutant rates are determined in the performance test period.

[40 CFR 60.44c(d) & 40 CFR 60, Appendix A.]

C.13. EPA Method 9 shall be used for determining the opacity of stack emissions.

[40 CFR 60.45c(a)(7)]

C.14. Testing for the sulfur content, for the nitrogen content, and for the heating value of oil storage tanks shall be conducted once per day when firing oil using ASTM D 2880-96.

[PSD-FL-146, Specific Condition No. 11.]

C.15. Opacity. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5).

[40 CFR 60.11(b)]

C.16. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]

Recordkeeping and Reporting Requirements

C.17. (a) Reserved.

(b) The owner or operator of each unit subject to the SO₂ emission limits of 40 CFR 60.42c, or the PM or opacity limits of 40 CFR 60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests.

(c) Reserved.

(d) The owner or operator of each unit subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall submit quarterly reports to the Administrator. The initial quarterly report shall be postmarked by the 30th day of the third month following the completion of the initial performance test. Each subsequent quarterly report shall be postmarked by the 30th day following the end of the reporting period.

(e) The owner or operator of each unit subject to the SO₂ emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records and submit quarterly reports as required under 40 CFR 60.48c(d), including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO₂ emission rate (ng/J or lb/million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO₂ emission rate calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

- (4) Identification of any steam generating unit operating days for which SO₂ or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.
 - (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.
 - (6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.
 - (7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.
 - (11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), or (3), as applicable. In addition to records of fuel supplier certifications, the quarterly report shall include a certified statement signed by the owner or operator of the unit that the records of fuel supplier certifications submitted represent all of the fuel combusted during the quarter.
- (f) Fuel supplier certification shall include the following information:
- (1) For distillate oil:
 - i. The name of the oil supplier; and
 - ii. A statement from the oil supplier that the oil complies with the specifications under the following definition of distillate oil:

"Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils"."
- (g) The owner or operator of each unit shall record and maintain records of the amounts of each fuel combusted during each day.
- (h) The owner or operator of each unit subject to a Federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c or 40 CFR 60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.
- i. All records required under this section shall be maintained by the owner or operator of the affected facility for a period of 5 (five) years following the date of such record. **Note:** As long as the auxiliary boiler operates only during startup and shutdown and for periodic maintenance testing, C.17(d) and (e) requirements under this specific condition are not applicable. See specific condition C.3.

[40 CFR 60.48c]

C.18. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

- (4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information

describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

[40 CFR 60.7(a)(4)]

C.19. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]

C.20. Reporting Frequency Reduction.

- (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
 - i. For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
 - ii. The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
 - iii. The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).
Note: As long as the auxiliary boiler operates only during startup and shutdown and for

periodic maintenance testing, requirements under this specific condition are not applicable.
See Specific Condition C.3.

[40 CFR 60.7(e)(1)]

- C.21. The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f); Rule 62-213.440(1)(b)2.b., F.A.C.]

- C.22. This emissions unit is also subject to the conditions contained in **Subsection E. Common Conditions.**

Subsection D. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
-009	Diesel Generator

This unit is used to supply power to Emissions Units 003, 004, 005, and 006 during power outages. The nameplate rating is 0.718 MW. Emissions are uncontrolled.

NESHAP and NSPS Applicability

{Permitting Notes: The emissions unit is regulated under 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) adopted in Rule 62-204.800(11) F.A.C., Rule 212.400, F.A.C.; Prevention of Significant Deterioration (PSD), Best Available Control Technology (BACT); and Air Construction Permits PSD-FL-146}.

The following specific conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

D.1. Hours of Operation. The diesel generator shall operate only for emergency power generation or periodic operational testing. [Rule 62-210.200(PTE), F.A.C.; and PSD-FL-146, revised 7/19/93.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions D.2. through D.3. are based on the specified averaging time of the applicable test method.}

D.2. Nitrogen Oxides. NO_x emissions for the diesel generator shall not exceed 15.0 grams/hp-hr. [PSD-FL-146, revised 7/19/93.]

D.3. Sulfur Dioxide. Sulfur dioxide emissions limitations for the diesel generator are established by limiting the light distillate fuel oil's average sulfur content to 0.3%, by weight, during any consecutive 12-month period. The 12-month average sulfur content shall be calculated as a weighted average based upon the sulfur content of the oil and the amount burned on a daily basis. [Rule 62-213.440, F.A.C.; applicant agreement with EPA on March 3, 1998; and PSD-FL-146, revised 7/19/93.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.4. Distillate fuel oil fired in the emergency diesel generator shall meet the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D 396-78 (or the latest edition), "Standard Specifications for Fuel Oils." Compliance with these specifications shall be verified with a fuel analysis provided by the vendor upon each fuel delivery.

[Requested by the applicant in electronic memorandum dated 09/18/97.]

Subsection E. Common Conditions.

E.U. ID No.	Brief Description
-001	Fossil Fuel Fired Steam Generator #1
-002	Fossil Fuel Fired Steam Generator #2
-003	Combustion Turbine with Heat Recovery Steam Generator (CT 3A)
-004	Combustion Turbine with Heat Recovery Steam Generator (CT 3B)
-005	Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
-006	Combustion Turbine with Heat Recovery Steam Generator (CT 4B)
-007	Auxiliary Boiler
-009	Diesel Generator (0.718 MW, for Units -003 to -006)
-011	Combustion Turbine with Heat Recovery Steam Generator (8A)
-012	Combustion Turbine with Heat Recovery Steam Generator (8B)
-014	Two distillate oil storage tanks for Unit 8 gas turbines
-017	Combustion Turbine with Heat Recovery Steam Generator (8C)
-018	Combustion Turbine with Heat Recovery Steam Generator (8D)
-019	Mechanical draft cooling tower for Unit 8

The following conditions apply to the emissions units listed above:

Test Methods and Procedures

E.1. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards. [Rule 62-297.310(1), F.A.C.]

E.1.1. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

E.2. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

TABLE 297.310-1
CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass reference thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calibration liquid in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass reference thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Figures 2-2 and 2-3
Probe Nozzles	Before each test, or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of the last three readings; maximum deviation between readings .004"
Dry gas meter and Orifice Meter	1. Full scale: when received, when 5% change observed, annually.	Spirometer or calibrated wet test or dry gas test meter	2%
	2. One point: Semiannually. 3. Check after each test series.	Comparison check	5%

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]

E.3. Determination of Process Variables.

- (a) **Required Equipment.** The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) **Accuracy of Equipment.** Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

- E.4. The permittee shall comply with the requirements contained in APPENDIX SS-1, Stack Sampling Facilities, attached to this permit. [Rule 62-297.310(6), F.A.C.]
- E.5. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4), F.A.C.

- (b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; SIP approved]

Recordkeeping and Reporting Requirements

- E.6. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

E.7. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
1. The type, location, and designation of the emissions unit tested.
 2. The facility at which the emissions unit is located.
 3. The owner or operator of the emissions unit.
 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 8. The date, starting time and duration of each sampling run.
 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.

10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

Subsection F. Reserved.

PSD-FL-286 for the simple cycle units is superseded by PSD-FL-327 for the "4-on-1" combined cycle combustion turbine system. Refer to Subsections H, I and J.

Subsection G. Reserved.

PSD-FL-286 for the simple cycle units is superseded by PSD-FL-327 for the “4-on-1” combined cycle combustion turbine system. Refer to Subsections H, I and J.

Subsection H. This section addresses the following emissions units.

E.U. ID No.	Emission Unit Description
011	Unit 8A gas turbine (170 MW) with heat recovery steam generator (495 MMBtu/hr)
012	Unit 8B gas turbine (170 MW) with heat recovery steam generator (495 MMBtu/hr)
017	Unit 8C gas turbine (170 MW) with heat recovery steam generator (495 MMBtu/hr)
018	Unit 8D gas turbine (170 MW) with heat recovery steam generator (495 MMBtu/hr)

Each unit consists of a nominal 170 MW General Electric Model PG7241(FA) gas turbine-electrical generator set, an automated gas turbine control system, an inlet air filtration system, an evaporative inlet air cooling system, a heat recovery steam generator (HRSG) each equipped with a 495 MMBtu/hr natural gas fired duct burner, a stack, and associated support equipment. Steam from each HRSG is delivered to the single steam turbine-electrical generator, which has a nominal capacity of 470 MW. The total nominal generating capacity of the "4 on 1" combined cycle unit system is 1150 MW. Each stack is 120 ft tall (19 ft diameter). At a compressor inlet air temperature of 59° F, each gas turbine heat input (LHV) is approximately 1600 MMBtu/hr (gas) and 1811 MMBtu/hour (oil). The exhaust flow rate is 1,004,200 ACFM (gas) and 1,193,900 ACFM (oil) at a temperature of 202° F and 295° F respectively.

The units are fired with natural gas as the primary fuel and distillate oil as a restricted alternate fuel. The efficient combustion of natural gas at high temperatures minimizes emissions of CO, PM/PM₁₀, SAM, SO₂, and VOC. NO_x emissions are reduced by Dry Low-NO_x (DLN) combustion technology (simple cycle mode). A selective catalytic reduction (SCR) system combined with Dry Low-NO_x (DLN) combustion technology further reduces NO_x emissions during combined cycle mode. These emissions units commenced commercial operation in June 2005.

Each gas turbine is equipped with continuous emissions monitoring system (CEMS) to measure and record CO and NO_x emissions as well as flue gas oxygen or carbon dioxide content.

Compliance assurance monitoring (CAM) does not apply since these emissions units have NO_x CEMS which are used to demonstrate continuous compliance.

Emissions Units 8A and 8B commenced commercial simple cycle operation in November 2001. In a permitting action issued on 2003, these two existing units in addition to two new units conformed the "4-on-1" combined cycle combustion system (Units 8A, 8B, 8C and 8D) that commenced commercial operation on June 30, 2005.

{Permitting note: These emissions units are regulated under Acid Rain-Phase II, 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines; 40CFR60, Subpart Da, Standards of Performance for Electric Utility Generating Units for Which Construction is Commenced After September 18, 1978, and 40 CFR 63, Subpart YYYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, all adopted by reference in Rule 62-204.800(8) and in Rule 62-204.800(11), F.A.C., Rule 212.400, F.A.C.; Prevention of Significant Deterioration (PSD), Best Available Control Technology (BACT); and Air Construction Permits PSD-FL-286 and PSD-FL-327 (0850001-010-AC) issued 04/16/03 and modified on 7/7/2005. PSD-FL-327 replaces and supersedes PSD-FL-286. On March 5, 2004, EPA promulgated 40 CFR 63, Subpart YYYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines built after January 14, 2003. Unit 3 was under contractual obligations before this date and is therefore an existing unit. Currently, 'existing combustion turbines' are not required to meet the emission limitations, notifications, reporting or any other requirements of Subpart YYYYY. EPA may at a future date promulgate standards for existing units.}

The following conditions apply to the emission units listed above:

Applicable Standards and Regulations

- H.1. BACT Determinations: Determinations of the Best Available Control Technology (BACT) were made for carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM/PM₁₀), sulfuric acid mist (SAM), and sulfur dioxide (SO₂), and volatile organic compounds (VOC). See Appendix BD of this permit for a summary of the final BACT determinations. [Rule 62-212.400(BACT), F.A.C.]
- H.2. NSPS Requirements: The Department determines that compliance with the BACT emissions performance and monitoring requirements also assures compliance with the New Source Performance Standards for Subpart Da (duct burners) and Subpart GG (gas turbines) in 40 CFR 60. For completeness, the applicable requirements of Subparts Da and GG are included in Appendices Da and GG of this permit. [Rule 62-204.800(7), F.A.C.]

Equipment

- H.3. Gas Turbines: The permittee is authorized to install, tune, operate, and maintain four General Electric Model PG7241FA gas turbine-electrical generator sets each with a generating capacity of 170 MW. Each gas turbine shall include a modern automated gas turbine control system and have dual-fuel capability. Ancillary equipment includes an inlet air filtration system, an evaporative inlet air-cooling system, and a bypass stack for simple cycle operation. The gas turbines will utilize DLN combustors. Electric fuel heaters will preheat the natural gas during simple cycle operation and during startup to combined cycle operation. For full combined cycle operation, feedwater heat exchangers will preheat the natural gas.

{Permitting Note: In accordance with Air Permit No. PSD-FL-286, two existing simple cycle gas turbines (Emission Unit Nos. 011 and 012) have been previously installed. These units have been incorporated into the "4-on-1" combined cycle Unit 8.} [Application; Design]

H.4. Gas Turbine NO_x Controls

- (a) DLN Combustion: The permittee shall operate and maintain the General Electric DLN 2.6 combustion system (or better) to control NO_x emissions from each gas turbine when firing natural gas. Prior to the initial emissions performance tests required for each gas turbine, the DLN combustors and automated gas turbine control system shall be tuned to achieve the simple cycle permitted levels for CO and NO_x emissions. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations.
- (b) Water Injection: The permittee shall install, operate, and maintain a water injection system to reduce NO_x emissions from each gas turbine when firing distillate oil. Prior to the initial emissions performance tests required for each gas turbine, the water injection system shall be tuned to achieve the permitted levels for CO and NO_x emissions. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations. The automated control system shall be programmed to establish a water-to-fuel ratio designed to achieve the NO_x emission standard for simple cycle oil firing on a 1-hour basis.
- (c) (SCR) System: The permittee shall install, tune, operate, and maintain a selective catalytic reduction (SCR) system to control NO_x emissions from each gas turbine during combined cycle operation when firing either natural gas or distillate oil. The SCR system consists of an ammonia injection grid, catalyst, ammonia storage, monitoring and control system, electrical, piping and other ancillary equipment. The SCR system shall be designed, constructed and operated to achieve the permitted levels for NO_x emissions and ammonia slip.

{Permitting Note: In accordance with 40 CFR 60.130, the storage of ammonia shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68.}

[Design; Rule 62-212.400(BACT), F.A.C.]

- H.5. Heat Recovery Steam Generators (HRSGs): The permittee is authorized to install, operate, and maintain four new heat recovery steam generators (HRSGs) with separate HRSG exhaust stacks. Each HRSG shall be designed to recover heat energy from one of the four gas turbines (8A-8D) and deliver steam to the steam turbine electrical generator through a common manifold. Each HRSG may be equipped with supplemental gas-fired duct burners having a maximum heat input rate of 495 MMBtu per hour (LHV). The duct burners shall be designed in accordance with the following specifications: 0.04 lb CO/MMBtu and 0.08 lb NO_x/MMBtu. *{Permitting Note: The four HRSGs deliver steam to a single steam turbine-electrical generator with a generating capacity of 470 MW.}* [Application; Design]

Performance Restrictions

- H.6. Permitted Capacity - Gas Turbines: The maximum heat input rate to each gas turbine is 1600 MMBtu per hour when firing natural gas and 1811 MMBtu per hour when firing distillate oil (based on a compressor inlet air temperature of 59° F, the lower heating value (LHV) of each fuel, and 100% load). Heat input rates will vary depending upon gas turbine characteristics, ambient conditions, alternate methods of operation, and evaporative cooling. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. [Rule 62-210.200(PTE), F.A.C.]
- H.7. Permitted Capacity - HRSG Duct Burners: The total maximum heat input rate to the duct burners for each HRSG is 495 MMBtu per hour based on the lower heating value (LHV) of natural gas. Only natural gas shall be fired in the duct burners. [Rule 62-210.200(PTE), F.A.C.]
- H.8. Methods of Operation: Subject to the restrictions and requirements of this permit, the gas turbines may operate under the following methods of operation.
- (a) *Hours of Operation*: Subject to the operational restrictions of this permit, the gas turbines may operate throughout the year (8760 hours per year). Restrictions on individual methods of operation are specified below.
 - (b) *Authorized Fuels*: Each gas turbine shall fire natural gas as the primary fuel, which shall contain no more than 2.0 grains of sulfur per 100 standard cubic feet of natural gas. As a restricted alternate fuel, each gas turbine may fire No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight. Each gas turbine shall fire no more than 500 hours of distillate oil during any consecutive 12 months.
 - (c) *Simple Cycle Operation*: Each gas turbine may operate individually in simple cycle mode to produce only direct, shaft-driven electrical power subject to the following operational restrictions.
 - 1. Each gas turbine shall operate in simple cycle mode for no more than 3390 hours during any consecutive 12 months.
 - 2. After demonstrating initial compliance in combined cycle mode, the combined group of four gas turbines shall operate in simple cycle mode for no more than an average of 1000 hours per gas turbine during any consecutive 12 months.
 - (d) *Combined Cycle Operation*: Each gas turbine/HRSG system may operate to produce direct, shaft-driven electrical power and steam-generated electrical power from the steam turbine-electrical generator as a four-on-one combined cycle unit subject to the restrictions of this permit. In accordance with the specifications of the SCR and HRSG manufacturers, the SCR

system shall be on line and functioning properly during combined cycle operation or when the HRSG is producing steam.

- (e) *Inlet Fogging*: In accordance with the manufacturer's recommendations and appropriate ambient conditions, the evaporative cooling system may be operated to reduce the compressor inlet air temperature and provide additional direct, shaft-driven electrical power. This method of operation is commonly referred to as "fogging" and may be used in either simple cycle or combined cycle modes.
- (f) *Peaking*: When firing natural gas, each gas turbine may operate in a high-temperature peaking mode to generate additional direct, shaft-driven electrical power to respond to peak demands. During any consecutive 12 months, each gas turbine shall operate while in the peaking mode for no more than 60 hours of simple cycle operation and no more than 400 hours of combined cycle operation.
- (g) *Power Augmentation*: When firing natural gas in either simple cycle or combined cycle modes, steam may be injected into each gas turbine to generate additional direct, shaft-driven electrical power to respond to peak demands. To qualify as "power augmentation", the combustion turbine must operate at a load of 95% or greater than that of the manufacturer's maximum base load rate adjusted for the compressor inlet air conditions. Prior to activating and after deactivating the power augmentation mode, the operator shall log the date, time, and new mode of operation. The gas turbines shall not operate simultaneously in peaking and power augmentation modes. Total combined operation of power augmentation and peaking modes shall not exceed 400 hours per unit during any consecutive 12 months.
- (h) *Combined Cycle Operation with HRSG Duct Firing*: When firing natural gas and operating in combined cycle mode, each HRSG system may fire natural gas in the duct burners to provide additional steam-generated electrical power. The total combined heat input rate to the duct burners (all four HRSGs) shall not exceed 5,702,400 MMBtu (LHV) during any consecutive 12 months.

[Application; Rules 62-210.200(PTE) and 62-212.400(BACT), F.A.C.]

Emissions Limitations and Standards

H.9. Emissions Standards: Emissions from each gas turbine shall not exceed the following standards.

Pollutant	Fuel	Method of Operation	Stack Test, 3-Run Average		CEMS Block Average
			ppmvd @ 15% O2	lb/hour	ppmvd @ 15% O2
CO ^a	Oil	Simple or Combined Cycle	14.4	64.7	15.0, 24-hr
	Gas	Simple Cycle	7.4	27.5	8.0, 24-hr
		Simple Cycle w/PA	12.0	45.0	12.0, 24-hr
		Combined Cycle, Normal	7.4	27.5	10.0, 24-hr
		Combined Cycle, All Modes	NA	NA	
NOx ^b	Oil	Simple Cycle	42.0	319.2	42.0, 3-hr
		Combined Cycle w/SCR	10.0	76.0	10.0, 24-hr
	Gas	Simple Cycle	9.0	58.7	9.0, 24-hr
		Simple Cycle w/PA	12.0	76.2	12.0, 24-hr
		Simple Cycle w/Peaking	15.0	95.3	15.0, 24-hr
		Combined Cycle w/SCR, Normal	2.5	16.3	2.5, 24-hr
		Combined Cycle w/SCR and DB	2.5	23.6	
		Combined Cycle w/SCR, All Modes	NA	NA	
PM/PM10 ^c	Oil/Gas	Simple or Combined Cycle	Fuel Specifications		
		Simple or Combined Cycle	Visible emissions shall not exceed 10% opacity for each 6-minute block average.		
SAM/SO2 ^d	Oil/Gas	Simple or Combined Cycle	Fuel Specifications		
VOC ^e	Oil	Simple or Combined Cycle	2.5	6.0	NA
	Gas	Simple or Normal Combined Cycle	1.3	2.8	NA
		Combined Cycle, w/DB and/or PA	4.0	10.5	NA
Ammonia ^f	Oil/Gas	Combined Cycle w/SCR	5	NA	NA

- Compliance with the CO standards shall be demonstrated based on data collected by the required CEMS. Compliance may also be determined by EPA Method 10. Compliance with the 24-hour CO CEMS standards shall be determined separately for each method of operation based on the hours of operation for each method. *{Permitting Note: A 24-hour compliance average may be based on as little as 1-hour of CEMS data or as much as 24-hours of CEMS data.}*
- Compliance with the NOx standards shall be demonstrated based on data collected by the required CEMS. Compliance may also be determined by EPA Method 7E or 20. NOx mass emission rates are defined as oxides of nitrogen expressed as NO₂. Compliance with the 24-hour NOx CEMS standards during simple cycle operation shall be determined separately for each method of operation based on the hours of operation for each method. *{Permitting Note: A 24-hour compliance average may be based on as little as 1-hour of CEMS data or as much as 24-hours of CEMS data.}*
- The fuel specifications established in Condition No. H.8 of this section combined with the efficient combustion design and operation of each gas turbine represents the Best Available Control Technology (BACT) determination for PM/PM₁₀ emissions. Compliance with the fuel specifications, CO standards, and visible emissions standards shall serve as indicators of good combustion. Compliance with the fuel specifications shall be demonstrated by keeping records of the fuel sulfur content. Compliance with the visible emissions standard shall be demonstrated by conducting tests in accordance with EPA Method 9. *{Permitting Note: PM₁₀ emissions for*

gas firing are estimated at 9 lb/hour for simple cycle operation, 11 lb/hour for combined cycle operation, and 17 lb/hour for combined cycle operation with duct burning. PM₁₀ emissions for oil firing are estimated at 17 lb/hour for simple cycle operation and 37 lb/hour for combined cycle operation.

- d. The fuel sulfur specifications in Condition No. H.8 of this section effectively limit the potential emissions of SAM and SO₂ from the gas turbines and represent the Best Available Control Technology (BACT) determination for these pollutants. Compliance with the fuel sulfur specifications shall be determined by the requirements in Condition No. H.27 of this section. *{Permitting Note: SO₂ emissions for gas firing are estimated at 9.8 lb/hour for simple and combined cycle operation and 12.8 lb/hour for combined cycle operation with duct burning. SO₂ emissions for oil firing are estimated at 99 lb/hour for simple and combined cycle operation. SAM emissions are estimated to be less than 10% of the SO₂ emissions.}*
- e. Compliance with the VOC standards shall be demonstrated by conducting tests in accordance with EPA Method 25A. Optionally, EPA Method 18 may also be performed to deduct emissions of methane and ethane. The emission standards are based on VOC measured as methane.
- f. Subject to the requirements of Condition No. H.21 of this section, each SCR system shall be designed and operated for an initial ammonia slip target of less than 5 ppmvd corrected to 15% oxygen based on the average of three test runs. Compliance with the ammonia slip standard shall be demonstrated by conducting tests in accordance with EPA Method CTC-027.

{Permitting Notes: "DB" means duct burning. "PA" means power augmentation. "SCR" means selective catalytic reduction. "NA" means not applicable. The mass emission rate standards are based on a turbine inlet condition of 59° F and may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department. Initial compliance tests under normal conditions for gas and oil firing have already been conducted for the existing Unit 8 gas turbines.}

[Rule 62-212.400(BACT), F.A.C.]

- H.10. Combined Cycle Operation With Steam Dumped to Condenser: If the steam-electrical turbine generator is off line, the permittee is authorized to operate the gas turbine/HRSG systems by dumping steam to the condenser. When operating in this manner, each unit shall comply with the standards established for combined cycle operation with ammonia injection (SCR). [Application]
- H.11. Duct Burners: The duct burners are also subject to the provisions of Subpart Da of the New Source Performance Standards in 40 CFR 60, which are summarized in Appendix Da.

{Permitting Note: During duct firing, compliance with the limits of this permit also demonstrates compliance with the standards of NSPS Subpart Da for duct burners.} [Subpart Da, 40 CFR 60]

Excess Emissions

- H.12. Operating Procedures: The Best Available Control Technology (BACT) determinations established by this permit rely on "good operating practices" to reduce emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the gas turbines, HRSGs, and pollution control systems in accordance with the guidelines and procedures established by each manufacturer. The training shall include good operating practices as well as methods of minimizing excess emissions. [Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]
- H.13. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rule 62-210.700(4), F.A.C.]

- H.14. Alternate Visible Emissions Standard: Visible emissions due to startups, shutdowns, and malfunctions shall not exceed 10% opacity except for up to ten, 6-minute averaging periods during a calendar day, which shall not exceed 20% opacity. [Rule 62-212.400(BACT), F.A.C.]
- H.15. Excess Emissions Allowed: As specified in this condition, excess emissions resulting from startup, shutdown, oil-to-gas fuel switches and documented malfunctions are allowed provided that operators employ the best operational practices to minimize the amount and duration of emissions during such incidents. A “documented malfunction” means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile transmittal, or electronic mail. For each gas turbine/HRSG system, excess emissions resulting from startup, shutdown, or documented malfunctions shall not exceed two hours in any 24-hour period except for the following specific cases.
- (a) *Steam Turbine/HRSG System Cold Startup*: For cold startup of the steam turbine system, excess emissions from any gas turbine/HRSG system shall not exceed eight (8) hours in any 24-hour period. Cold startup of the steam turbine system shall be completed within twelve hours. A cold “startup of the steam turbine system” is defined as startup of the 4-on-1 combined cycle system following a shutdown of the steam turbine lasting at least 48 hours.
{Permitting Note: During a cold startup of the steam turbine system, each gas turbine/HRSG system is sequentially brought on line at low load to gradually increase the temperature of the steam-electrical turbine and prevent thermal metal fatigue. Note that shutdowns and documented malfunctions are separately regulated in accordance with the requirements of this condition.}
 - (b) *Shutdown*: For shutdown of the steam turbine system, excess emissions from any gas turbine/HRSG system shall not exceed three (3) hours in any 24-hour period.
 - (c) *Cold startup of a Gas Turbine/HRSG system*: For cold startup of a gas turbine/HRSG system, excess emissions shall not exceed four (4) hours in any 24-hour period. “Cold startup of a gas turbine/HRSG system” is defined as a startup after the pressure in the high-pressure (HP) steam drum falls below 450 psig for at least a one-hour period.
 - (d) *Fuel Switching*: For fuel switching (oil-to-gas or gas to oil), excess emissions shall not exceed one (1) hour in any 24-hour period.

Ammonia injection shall begin as soon as operation of the gas turbine/HRSG system achieves the operating parameters specified by the manufacturer. As authorized by Rule 62-210.700(5), F.A.C., the above conditions allow excess emissions only for specifically defined periods of startup, shutdown, and documented malfunction of the gas turbines. [Design; Rules 62-212.400(BACT) and 62-210.700, F.A.C.]

- H.16. DLN Tuning: CEMS data collected during initial or other major DLN tuning sessions shall be excluded from the CEMS compliance demonstration provided the tuning session is performed in accordance with the manufacturer’s specifications. A “major tuning session” would occur after completion of initial construction, a combustor change-out, a major repair or maintenance to a combustor, or other similar circumstances. Prior to performing any major tuning session, the permittee shall provide the Compliance Authority with an advance notice that details the activity and proposed tuning schedule. The notice may be by telephone, facsimile transmittal, or electronic mail. [Design; Rule 62-4.070(3), F.A.C.]

Emissions Performance Testing

H.17. Test Methods: Any required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
CTM-027	Procedure for Collection and Analysis of Ammonia in Stationary Source {Notes: This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.}
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Notes: The method shall be based on a continuous sampling train.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography {Note: EPA Method 18 may be used (optional) concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions.}
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
25A	Determination of Volatile Organic Concentrations

Method CTM-027 is published on EPA's Technology Transfer Network Web Site at "<http://www.epa.gov/ttn/emc/ctm.html>". The other methods are described in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, F.A.C.; 40 CFR 60, Appendix A]

H.18. Special Compliance Determinations: The Department may require the permittee to conduct additional tests after major replacement or major repair of any air pollution control equipment, such as the SCR catalyst, DLN combustors, etc. Each gas turbine shall be stack tested to demonstrate compliance with the emission standards for CO, NOx, VOC, visible emissions, and ammonia slip. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated for each unit configuration (i.e., simple cycle and combined cycle operation), but not later than 180 days after startup of each unit configuration. Each unit shall be tested when firing natural gas and distillate oil. CEMS data collected during the required Relative Accuracy Test Assessments (RATA) may be used to demonstrate compliance with the CO and NOx standards. With appropriate flow measurements (or fuel measurements and approved F-factors), CEMS data may be used to demonstrate compliance with the CO and NOx mass rate emissions standards. CO and NOx emissions recorded by the CEMS shall also be reported for each run during tests for visible emissions, VOC and ammonia slip. CO and VOC emissions tests performed during simple cycle operation may be used to satisfy the test requirements for similar operation in combined cycle mode. [Rule 62-297.310(7)(a)1, F.A.C. and 40 CFR 60.8]

H.19. Continuous Compliance: The permittee shall demonstrate continuous compliance with the CO and NOx emissions standards based on data collected by the certified CEMS. Within 45 days of conducting any Relative Accuracy Test Assessments (RATA) on a CEMS, the permittee shall submit a report to the Compliance Authority summarizing results of the RATA. Compliance with the CO emission standards also serves as an indicator of efficient fuel combustion, which reduces emissions of particulate matter and volatile organic compounds. [Rule 62-212.400 (BACT), F.A.C.]

H.20. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), each gas turbine shall be tested to demonstrate compliance with the emission standards for visible emissions. CEMS data collected during the required Relative Accuracy Test Assessments (RATA) may be used to demonstrate compliance with the CO and NOx standards. Annual testing to determine the ammonia slip shall be conducted while firing the primary fuel. NOx emissions recorded by the CEMS shall be reported for each ammonia slip test run. CO emissions recorded by the CEMS shall be reported for the visible emissions observation period.

{Permitting Note: After initial compliance with the VOC standards is demonstrated, annual compliance tests for VOC emissions are not required. Compliance with the continuously monitored CO standards shall indicate efficient combustion and low VOC emissions.}

[Rules 62-212.400 (BACT) and 62-297.310(7)(a)4, F.A.C.]

H.21. Additional Ammonia Slip Testing: If the tested ammonia slip rate for a gas turbine exceeds 5 ppmvd corrected to 15% oxygen when firing natural gas during the annual test, the permittee shall:

- (a) Begin testing and reporting the ammonia slip for each subsequent calendar quarter;
- (b) Before the ammonia slip exceeds 7 ppmvd corrected to 15% oxygen, take corrective actions that result in lowering the ammonia slip to less than 5 ppmvd corrected to 15% oxygen; and
- (c) Test and demonstrate that the ammonia slip is no more than 5 ppmvd corrected to 15% oxygen within 15 days after completing the corrective actions.

Corrective actions may include, but are not limited to, adding catalyst, replacing catalyst, or other SCR system maintenance or repair. After demonstrating that the ammonia slip level is no more than 5 ppmvd corrected to 15% oxygen, testing and reporting shall resume on an annual basis.

[Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.]

Continuous Monitoring Requirements

H.22. CEM Systems: The permittee shall install, calibrate, maintain, and operate continuous emission monitoring systems (CEMS) to measure and record the emissions of CO and NOx from the combined cycle gas turbine in a manner sufficient to demonstrate continuous compliance with the CEMS emission standards of this section. Each monitoring system shall be installed, calibrated, and properly functioning prior to the initial performance tests. Within one working day of discovering emissions in excess of a CO or NOx standard (and subject to the specified averaging period), the permittee shall notify the Compliance Authority.

- (a) *CO Monitors*. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The RATA tests required for the CO monitor shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. The CO monitor span values shall be set appropriately considering the allowable methods of operation and corresponding emission standards.
- (b) *NOx Monitors*. Each NOx monitor shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75. Record keeping and reporting shall be conducted pursuant to Subparts F and G in 40 CFR 75. The RATA tests required for the NOx monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60. In addition to the requirements of Appendix A of 40 CFR 75, the NOx monitor span values shall be set appropriately considering the allowable methods of operation and corresponding emission standards.

- (c) *Diluent Monitors.* The oxygen (O₂) or carbon dioxide (CO₂) content of the flue gas shall be monitored at the location where CO and NO_x are monitored to correct the measured emissions rates to 15% oxygen. If a CO₂ monitor is installed, the oxygen content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.
- (d) *1-Hour Block Averages.* Hourly average values shall begin at the top of each hour. Each hourly average value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). If less than two such data points are available, the hourly average value is not valid. An hour in which any oil is fired is attributed towards compliance with the permit standards for oil firing. The permittee shall use all valid measurements or data points collected during an hour to calculate the hourly average values. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over an hour. If the CEMS measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEMS shall be expressed as ppmvd corrected to 15% oxygen. The CEMS shall be used to demonstrate compliance with the CEMS emission standards for CO and NO_x as specified in this permit. For purposes of determining compliance with the CEMS emissions standards of this permit, missing (or excluded) data shall not be substituted. Upon request by the Department, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332.
- (e) *3-hour Block Averages:* For oil firing during simple cycle operation, the 3-hour block average shall be calculated from three consecutive hourly average emission rate values. For purposes of determining compliance with the CEMS emission standards of this permit, missing (or excluded) data shall not be substituted. Instead, the 3-hour block average shall be determined using the remaining hourly data in the 3-hour block. [Rule 62-212.400(BACT), F.A.C.]
- (f) *24-hour Block Averages:* A 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive hourly average emission rate values. If a unit operates less than 24 hours during the block, the 24-hour block average shall be the average of available valid hourly average emission rate values for the 24-hour block. For purposes of determining compliance with the 24-hour CEMS standards, missing (or excluded) data shall not be substituted. Instead, the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block. {Permitting Note: There may be more than one 24-hour compliance demonstration required for CO and NO_x emissions depending on the use of alternate methods of operation}. [Rule 62-212.400(BACT), F.A.C.]
- (g) *Data Exclusion.* Each CEMS shall monitor and record emissions during all operations including episodes of startup, shutdown, malfunction, fuel switches, and DLN tuning. CEMS emissions data recorded during some of these episodes may be excluded from the corresponding CEMS compliance demonstration subject to the provisions of Condition Nos. 15 and 16 of this section. All periods of data excluded shall be consecutive for each such episode. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable. Data recorded during such episodes shall not be excluded if the episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or

process failure, which may reasonably be prevented. Best operational practices shall be used to minimize hourly emissions that occur during such episodes. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.

- (h) *Availability.* Monitor availability for the CEMS shall be 95% or greater in any calendar quarter. The quarterly permit excess emissions report shall be used to demonstrate monitor availability. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Department's Compliance Authority.

{Permitting Note: Compliance with these requirements ensure compliance with the other applicable CEM system requirements such as: NSPS Subparts Da and GG; Rule 62-297.520, F.A.C.; 40 CFR 60.7(a)(5) and 40 CFR 60.13; 40 CFR Part 51, Appendix P; 40 CFR 60, Appendix B - Performance Specifications; and 40 CFR 60, Appendix F - Quality Assurance Procedures.}
[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

- H.23. Water Injection Monitoring Requirements: In accordance with the manufacturer's specifications, the permittee shall install, calibrate, operate and maintain a monitoring system to continuously measure and record the water-to-fuel ratio when firing distillate oil. The permittee shall document the water-to-fuel ratio required to meet permitted emissions levels over the range of load conditions allowed by this permit. The NOx CEMS is used to demonstrate compliance with the NOx emissions standards. During NOx CEMS downtimes or malfunctions, the permittee shall monitor the water-to-fuel ratio and operate at a level that is consistent with the documented flow rate for the gas turbine load condition.

{Permitting Note: The actual water-to-fuel ratio will vary depending on operating conditions and load.}

[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

- H.24. Ammonia Monitoring Requirements: In accordance with the manufacturer's specifications, the permittee shall install, calibrate, operate and maintain an ammonia flow meter to measure and record the ammonia injection rate to the SCR system. The permittee shall document the general range of ammonia flow rates required to meet permitted emissions levels over the range of load conditions allowed by this permit by comparing NOx emissions recorded by the CEM system with ammonia flow rates recorded using the ammonia flow meter. During NOx monitor downtimes or malfunctions, the permittee shall operate at the ammonia flow rate that is consistent with the documented flow rate for the combustion turbine load condition.

[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

Records and Reports

- H.25. Monitoring of Capacity: The permittee shall monitor and record the operating rate of each gas turbine and HRSG duct burner system on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). Such monitoring shall be made using a monitoring component of the CEM system required above, or by monitoring daily rates of consumption and heat content of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]
- H.26. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the following for each fuel in a written or electronic log for each gas turbine for the previous month

of operation: fuel consumption, hours of operation, hours of power augmentation, hours of peaking, hours of duct firing, and the updated 12-month rolling totals for each. Information recorded and stored as an electronic file shall be available for inspection and printing within at least three days of a request by the Department. The fuel consumption shall be monitored in accordance with the provisions of 40 CFR 75 Appendix D.

[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

H.27. Fuel Sulfur Records: The permittee shall demonstrate compliance with the fuel sulfur limits specified in this permit by maintaining the following records of the sulfur contents.

(a) Compliance with the fuel sulfur limit for natural gas shall be demonstrated by keeping reports obtained from the vendor indicating the average sulfur content of the natural gas being supplied from the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or more recent versions.

(b) Compliance with the distillate oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur, and reporting the results to each Compliance Authority before initial startup. Sampling the fuel oil sulfur content shall be conducted in accordance with ASTM D4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, and one of the following test methods for sulfur in petroleum products: ASTM D129-91, ASTM D1552-90, ASTM D2622-94, or ASTM D4294-90. More recent versions of these methods may be used. For each subsequent fuel delivery, the permittee shall maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor. At the request of a Compliance Authority, the permittee shall perform additional sampling and analysis for the fuel sulfur content.

The above methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3) and 62-4.160(15), F.A.C.]

H.28. Malfunction Notification: Within one working day of a malfunction that causes emissions in excess of a standard (subject to the specified averaging periods), the permittee shall notify the Compliance Authority. The notification shall include a preliminary report of: the nature, extent, and duration of the emissions; the probable cause of the emissions; and the actions taken to correct the problem. If requested by the Compliance Authority, the permittee shall submit written quarterly reports summarizing the malfunctions. [Rule 62-210.700, F.A.C.]

H.29. Semiannual NSPS Excess Emissions Report: In accordance with 40 CFR 60.7(d), the permittee shall submit a report to the Compliance Authority summarizing any emissions in excess of the NSPS standards within 30 days following the end of each calendar quarter. For purposes of reporting emissions in excess of NSPS Subpart GG, excess emissions from the gas turbine are defined as: any CEMS hourly average value exceeding the NSPS NO_x emission standard identified in Appendix GG; and any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds the NSPS standard identified in Appendix GG. For purposes of reporting emissions in excess of NSPS Subpart Da, excess emissions from duct firing are defined as: NO_x or PM emissions in excess of the NSPS standards except during periods of startup, shutdown, or malfunction; and SO₂ emissions in excess of the NSPS standards except during startup or shutdown. An example of the report is provided on Appendix XS. [40 CFR 60.7]

H.30. Quarterly Permit Excess Emission Report: Within 30 days following the end of each quarter, the permittee shall submit a report to the Compliance Authority summarizing periods of excess CO and NO_x emissions. Such information shall also be summarized for simple/combined cycle startups, simple/combined cycle shutdowns, malfunctions, and major tuning sessions. In addition, the report shall summarize the CEMS systems monitor availability for the previous quarter.

[Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C.; and 40 CFR 60.7]

- H.31. Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60 shall apply, except that the term "Administrator" when used in 40 CFR 60 shall mean the Secretary or the Secretary's designee.
[40 CFR 60.2; and Rule 62-204.800(7)(a), F.A.C.]
- H.32. Concealment. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]
- H.33. Circumvention. The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly.
[Rule 62-210.650, F.A.C.; and 0850001-008-AC, Specific Condition 14. (Facility Information Section)]
- H.34. Common Conditions: These emissions units are also subject to the conditions contained in Subsection E. Common Conditions and all applicable requirements of the attached **Appendices**, made part of the permit.

Subsection I. This section addresses the following emissions units.

This section of the permit addresses the following new emissions unit.

Emission Unit ID	Emission Unit Description
020	22-cell mechanical draft cooling tower

Equipment

- I.1. Cooling Tower: The permittee is authorized to install one new 22-cell mechanical draft cooling tower with the following design characteristics: a circulating water flow rate of 310,000 gpm; design hot/cold water temperatures of 104° F/90° F; a design air flow rate of 1,386,055 per cell; a liquid-to-gas air flow ratio of 1.4; and drift eliminators with a drift rate of no more than 0.001 percent.
[Application; Design]

Emissions and Performance Requirements

- I.2. Drift Rate: Within 60 days of commencing operation, the permittee shall submit certification that the cooling tower was constructed to achieve the specified drift rate of no more than 0.001 percent of the circulating water flow rate.

{Permitting Note: This work practice standard is established as BACT for PM/PM₁₀ emissions from the cooling tower. Based on this design criteria, potential emissions are expected to be less than 34 tons of PM per year and less than 10 tons of PM₁₀ per year. Actual emissions are expected be less than half these rates.}

[Rule 62-212.400(BACT), F.A.C.]

General

- I.3. Common Conditions: This emissions unit is also subject to applicable requirements of the conditions contained in **Subsection E. Common Conditions** and all applicable requirements of the attached **Appendices**, made part of the permit.

Subsection J. This section addresses the following emissions units.

This section of the permit addresses the following emissions units.

Emissions Unit ID	Emission Unit Description
014	Two distillate oil storage tanks for Unit 8 gas turbines (2.1 million gallons each)

NSPS Applicability

- J.1. NSPS Subpart Kb Applicability: The distillate oil tanks are not subject to Subpart Kb, which applies to any storage tank with a capacity greater than or equal to 10,300 gallons (40 cubic meters) that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984. Tanks with a capacity greater than or equal to 40,000 gallons (151 cubic meters) storing a liquid with a maximum true vapor pressure less than 3.5 kPa are exempt from the General Provisions (40 CFR 60, Subpart A) and from the provisions of NSPS Subpart Kb.

[40 CFR 60.110b(a) and (c); Rule 62-204.800(7)(b), F.A.C.]

Equipment Specifications

- J.2. Equipment: The permittee is authorized to install, operate, and maintain two, 2.1 million gallon distillate oil storage tank designed to provide low sulfur distillate oil to the Unit 8 gas turbines.
[Applicant Request; Rule 62-210.200(PTE), F.A.C.]

{Permitting Note: One existing 2.1 million gallon distillate oil storage tank was permitted under PSD-FL-286.}

Emissions and Performance Requirements

- J.3. Hours of Operation: The hours of operation are not restricted (8760 hours per year). [Applicant Request; Rule 62-210.200(PTE), F.A.C.]

Notification, Reporting and Records

- J.4. Oil Tank Records: The permittee shall keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of each storage tank. Records shall be retained for the life of the facility. The permittee shall also keep records sufficient to determine the annual throughput of distillate oil for each storage tank for use in the Annual Operating Report.
[Rule 62-204.800(7)(b)16, F.A.C.; 40 CFR 60.116b(a) and (b)]

{Permitting Note: These new distillate oil storage tanks serve Unit 8. An existing 50,000-barrel distillate oil storage tank was constructed as part of Units 3 and 4. The existing tank was identified for use in Permit No. PSD-FL-268 issued for simple cycle Units 8A and 8B. Unit 8 will utilize both the existing and new distillate oil storage tanks.}

- J.5. Fuel Oil Records: The permittee shall keep readily accessible records showing the maximum true vapor pressure of the stored liquid. The maximum true vapor pressure shall be less than 3.5 kPa. Compliance with this condition may be demonstrated by using the information from the respective MSDS for the low or ultralow sulfur fuel oil stored in the tanks.
[62-4.070(3) F.A.C.]

{Permitting Note: An evaluation of several Material Safety Data Sheets (MSDS) by the Department demonstrated that the vapor pressure is much less than 3.5 kPa for low sulfur fuel oil and for ultralow sulfur fuel oil.}

General

J.6. Common Conditions: These emissions units are also subject to applicable requirements of the conditions contained in **Subsection E. Common Conditions** and all applicable requirements of the attached **Appendices**, made part of the permit.

Section IV. This section is the Acid Rain Part.

Operated by: Florida Power and Light Company

ORIS code: 6043

Subsection A. This subsection addresses Acid Rain, Phase II.

The emissions units listed below are regulated under Phase II of the Federal Acid Rain Program.

E.U. ID No.	EPA ID	Brief Description
-001	PMR1	Fossil Fuel Fired Steam Generator #1
-002	PMR2	Fossil Fuel Fired Steam Generator #2
-003	HRSG3A	Combustion Turbine with Heat Recovery Steam Generator (CT 3A)
-004	HRSG3B	Combustion Turbine with Heat Recovery Steam Generator (CT 3B)
-005	HRSG4A	Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
-006	HRSG4B	Combustion Turbine with Heat Recovery Steam Generator (CT 4B)
-011	PMR8A	Combustion Turbine with Heat Recovery Steam Generator (CT 8A)
-012	PMR8B	Combustion Turbine with Heat Recovery Steam Generator (CT 8B)
-017	PMR8C	Combustion Turbine with Heat Recovery Steam Generator (CT 8C)
-018	PMR8D	Combustion Turbine with Heat Recovery Steam Generator (CT 8D)

A.1. The Phase II part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:

- a. DEP Form No. 62-210.900(1)(a), Phase II Acid Rain Part Application, signed by the Designated Representative on April 7, 2003, and received by the Department on July 3, 2003.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO₂) allowance allocations for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2004	2005	2006	2007	2008
-001	PMR1	SO ₂ allowances, under Table 2 of 40 CFR Part 73	5092*	5092*	5092*	5092*	5092*
-002	PMR2	SO ₂ allowances, under Table 2 of 40 CFR Part 73	6039*	6039*	6039*	6039*	6039*

E.U. ID No.	EPA ID	Year	2004	2005	2006	2007	2008
-003	HRSG3 A	SO2 allowances, under Table 2 of 40 CFR Part 73	1275*	1275*	1275*	1275*	1275*
-004	HRSG3 B	SO2 allowances, under Table 2 of 40 CFR Part 73	1275*	1275*	1275*	1275*	1275*
-005	HRSG4 A	SO2 allowances, under Table 2 of 40 CFR Part 73	1275*	1275*	1275*	1275*	1275*
-006	HRSG4 B	SO2 allowances, under Table 2 of 40 CFR Part 73	1275*	1275*	1275*	1275*	1275*
-011	PMR8A	SO2 allowances to be determined by U.S. EPA	N/A	0	0	0	0
-012	PMR8B	SO2 allowances to be determined by U.S. EPA	N/A	0	0	0	0
-017	PMR8C	SO2 allowances to be determined by U.S. EPA	N/A	0	0	0	0
-018	PMR8D	SO2 allowances to be determined by U.S. EPA	N/A	0	0	0	0

*The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 of 40 CFR 73.

A.3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

- (1) No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.

(2) No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.

(3) Allowances shall be accounted for under the Federal Acid Rain Program.

[Rule 62-213.440(1)(c), F.A.C.]

A.4. Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, F.A.C., Fast-Track Revisions of Acid Rain Parts.

[Rule 62-213.413, F.A.C.]

A.5. Comments, notes, and justifications: None.

Appendix I-1. List of Insignificant Emissions Units and/or Activities.

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

	Brief Description of Emissions Units and/or Activities
1	Chemical Feed Skid , consisting of: Ammonia Feed Tanks Vent Hydrazine Feed Tanks Vent H. P. Phosphate Feed Tanks Vent I. P. Phosphate Feed Tanks Vent
2	Fire Protection Equipment with: .75" Vents to Atmosphere Diesel Engine Exhaust 2" Diesel Day Tank Vent CT Lube Seal Trip, and Hydraulic Oil 3" Bearing Drain Enlargement Exhausters Vent to Atmosphere Auxiliary Buildings H.V.A.C. Vent/Exhaust System for, Switchgear Rooms Chemical Storage Room Water Chemistry Lab Fume Hoods
3	Main Liquid Fuel .75" Vents to Atmosphere 2" Liquid Fuel Drain Tank Vent (235 gallon) 8" Vent with Filter for Units 3 and 4 Liquid Fuel Storage Tank (2,000,000 gallon)
4	Auxiliary Steam, Chemical Feed, Chlorine and Gas Purging , comprised of: Ash Pit <u>Potable Water</u> Bleach Tank 2" Vent (2,000 gallons)

	<u>Lube Oil</u> Lube Oil Storage Tanks Vent B.F.P. Lube Oil B.F.P. Lube Oil Reservoir Vent Fan 4" B.F.P. Lube Oil Batch Tank 3" Vent and Filter B.F.P. Lube Oil Conditioner Vent Fan 4" <u>Light Oil System</u> Light Oil Tank 6" Vent (2,000 bbl) Water Draw-Off Sump Diesel Day Tank .75" Vent - (550 gallon) Chemical Feed Tank Vent <u>Turbine Gland Seal Steam and Drain</u> Gland Steam Condenser Exhauster 6" Vent to Atmosphere <u>Fuel Oil at Burners</u> 1" Vents to Atmosphere Natural Gas 2" Vent to Atmosphere 6" Vent to Atmosphere <u>Ignition (LP) Gas</u> 1" Control Vent to Atmosphere L.P. Gas Tanks Relief Valve <u>Fuel Oil at Heaters</u> 1" Vents to Atmosphere M.C.C. Areas Exhaust Fans Lab Exhaust Hood <u>Turbine Generator Lube Oil</u> Generator Loop Seal Tank Exhauster 4" Vent to Atmosphere Turbine Lube Oil Reservoir Vapor Extractor 6" Vent Turbine Generator Lube Oil Batch Tank 4" Vent with Filter Turbine Generator Lube Oil Conditioner Vapor Extractor 4" Vent 1" Polishing Filter Vent 1" Air Educator Vent Electrically Heated Equipment Used for Heat Treating, Tracing, Drying, Soaking, Case Hardening or Surface Conditioning
5	Gas Metering Area (for Units 1 and 2) Gas Oil Separator Tank 8" Exhaust Vent Gas Oil Separator Tank 1.5" Vent Relief Valve 6" Blowdown Valve Gas Scrubber Relief Valve Condensate Tank with Filter
6	Sand Blast Booth
7	Evaporation of Non-Hazardous Boiler Chemical Cleaning Waste

Appendix U-1. List of Unregulated Emissions Units and/or Activities.

Unregulated Emissions Units and/or Activities. An emissions unit which emits no “emissions-limited pollutant” and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither ‘regulated emissions units’ nor ‘insignificant emissions units’.

E.U. ID No.	Brief Description of Emissions Units and/or Activities
-015	Diesel Generator (for Units -001 and -002)
-016	Facility-wide Fugitive Emissions for PM and VOCs

Table 1-1, Air Pollutant Standards and Terms

Florida Power & Light Company
Martin Plant

Permit No. **0850001-017-AV**
 Facility ID No. **0850001**

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No(s)	Brief Description	Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citations	See Permit Conditions
					Standard(s)	lbs/hour	TPY	lbs/hour	TPY		
-001 -002	Fossil Fuel Fired Steam Generators	PM	Oil	8760	0.1 lb/MMBtu			865	3788.7	40 CFR 60.42	A.5
			Gas	8760	0.1 lb/MMBtu						
		SO ₂	Oil	8760	0.8 lb/MMBtu			6920	30309	40 CFR 60.43	A.9
		NO _x	Oil	8760	0.3 lb/MMBtu			2595	11366.1	40 CFR 60.44	A.10
			Gas	8760	0.2 lb/MMBtu			1608	7919.04		
		VE	Oil	8760	Not > 20%						A.8
-003 -004 -005 -006	Combined Cycle Combustion Turbines Units 3 and 4	PM/PM ₁₀	Oil	2000		60.6	100			Rule 62-212.410, F.A.C.	B.6
			Gas	8760		18					
		SO ₂	Oil	2000	0.5% sulfur	920	568			40 CFR 60.333	B.6
			Gas	8760		91.5					
		NO _x	Oil	2000	65 ppmvd @ 15% O ₂	461	3108			40 CFR 60.332	B.6
			Gas	8760	25 ppmvd @ 15% O ₂	177					
		VOC	Oil	2000	6 ppmvd	11	57			Rule 62-210.200 (39), F.A.C.	B.6
			Gas	8760	1.6 ppmvd	3					
		CO	Oil	2000	33 ppmvd	105.8	871			Rule 62-210.200 (39), F.A.C.	B.6
			Gas	8760	30 ppmvd	94.3					
		PB	Oil	2000		0.015	0.015			Rule 62-210.200 (39), F.A.C.	B.6
			Gas	8760		Negligible					
		SAM	Oil	2000		113	70			Rule 62-210.200 (39), F.A.C.	B.7
			Gas	8760		11.2					
		H114	Oil	2000		0.0052	0.34			Rule 62-210.200 (39), F.A.C.	B.7
			Gas	8760		0.021					
		FL	Oil	2000		0.055	0.055			Rule 62-210.200 (39), F.A.C.	B.7
		H021	Oil	2000		0.004	0.004			Rule 62-210.200 (39), F.A.C.	B.7
			Gas	8760							
		VE	Oil	2000	Not > 20%					Rule 62-210.200 (39), F.A.C.	B.8
			Gas	8760	Not > 10%						
-007	Auxiliary Boiler	VE	Oil	8760	Not > 20%					40 CFR 60.43c	C.5
		NO _x	Gas/Oil	8760	0.3 lb/MMBtu			4.88	21.37	Rule 62-210.200 (39), F.A.C.	C.10
		SO ₂	Gas/Oil	8760	0.3% Sulfur in Oil					Rule 62-210.200 (39), F.A.C.	C.8
-009	Diesel Generator (for -003 to -006)	NO _x	Oil	400	15 gm./hp-hr.					Rule 62-210.200 (39), F.A.C.	D.2
		SO ₂	Oil	400	0.3% Sulfur in Oil					Rule 62-210.200 (39), F.A.C.	D.3

*The "Equivalent Emissions" listed are for informational purposes only.

COMBINED CYCLE UNIT 8

Each gas turbine shall fire no more than 500 hours of distillate oil during any consecutive 12 months.

After demonstrating initial compliance in combined cycle mode, the combined group of four gas turbines shall operate in simple cycle for no more than an average of 1000 hours per gas turbine during any consecutive 12 months.

Continuous Emissions Monitoring System (CEMS): Block Average, ppmvd @ 15% O₂

Table 1-1, Air Pollutant Standards and Terms

Permit No. 0850001-017-AV

E.U. ID No(s)	Brief Description	Pollutant	Fuel	Mode	Stack Test, 3-Run Average		CEMS	Equivalent Emissions	Regulatory Citations	See Permit Conditions
					ppmvd@15%O ₂	lb/hr	ppmvd	lb/hr		
-011 -012 -017 -018	Combined Cycle Combustion Turbine Unit 8	CO	Oil	Simple or Combined Cycle	14.4	64.7	15.0, 24-hr		Rule 62-210.200 (39), F.A.C.	H.9
				Simple Cycle	7.4	27.5	8.0, 24-hr			
				Simple Cycle w/PA	12	45	12.0, 24-hr			
				Combined Cycle, Normal	7.4	27.5				
				Combined Cycle, All Modes	NA	NA	10.0, 24-hr			
		NOx	Oil	Simple Cycle	42	319.2	42, 3-hr		Rule 62-210.200 (39), F.A.C.	H.9
				Combined	10	76	10.0, 24-hr			
				Cycle w/SCR						
				Simple Cycle	9	58.7	9.0, 24-hr			
				Simple Cycle w/PA	12	76.2	12.0, 24-hr			
				Simple Cycle w/Peaking	15	95.3	15.0, 24-hr			
				Combined Cycle w/SCR, Normal	2.5	16.3				
				Combined Cycle w/SCR and DB	2.5	23.6				
				Combined Cycle w/SCR, All Modes	NA	NA	2.5, 24-hr			
		PM/PM ₁₀	Oil/Gas	Simple or Combined	Fuel Specifications				Rule 62-210.200 (39), F.A.C.	H.9
				Simple or Combined	Visible emissions shall not exceed 10% opacity for each 6-minute block average.					
		SAM/SO ₂	Oil/Gas	Simple or Combined	Fuel Specifications				Rule 62-210.200 (39), F.A.C.	H.9
		VOC	Oil	Simple or Combined Cycle	2.5	6	NA		Rule 62-210.200 (39), F.A.C.	H.9
				Simple or Normal Combined Cycle	1.3	2.8	NA			
				Combined Cycle, w/DB and/or PA	4	10.5	NA			
		Ammonia	Oil/Gas	Combined Cycle w/SCR	5	NA	NA		Rule 62-210.200 (39), F.A.C.	H.9

Table 2-1, Compliance Requirements

Florida Power & Light Company Martin Plant				Permit No. 0850001-017-AV Facility ID No. 0850001				
This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.								
E.U. ID Nos.		Brief Description		Testing Time Frequency	Frequency Base Date **	Min. Compliance Test Duration	CMS*	See Permit Conditions
-001		Fossil Fuel Fired Steam Generator						
-002		Fossil Fuel Fired Steam Generator						
Pollutant Name or parameter	Fuel(s)	Compliance Method						
VE	Oil	DEP Method 9		Annual	1-Oct	1 Hour		A.15
PM	Oil	EPA Method 5		Annual	1-Oct	3 Hours		A.18
	Gas	EPA Method 5		Annual	1-Oct	3 Hours		A.18
SO2	Oil	EPA Method 6C		Annual	1-Oct		Yes	A.18
	Gas	EPA Method 6C		Annual	1-Oct		Yes	A.18
NOx	Oil	EPA Method 7E		Annual	1-Oct		Yes	A.18
	Gas	EPA Method 7E		Annual	1-Oct		Yes	A.18
CO2 (Diluent Gas)							Yes	A.23
Volumetric Flow							Yes	A.23
Opacity							Yes	A.23
E.U. ID Nos.		Brief Description		Testing Time Frequency	Frequency Base Date **	Min. Compliance Test Duration	CMS*	See Permit Conditions
-003		Combustion Turbine with HRSG						
-004		Combustion Turbine with HRSG						
-005		Combustion Turbine with HRSG						
-006		Combustion Turbine with HRSG						
Pollutant Name or Parameter	Fuel(s)	Compliance Method						
VE	Oil	DEP Method 9		Annual	1-Oct	1 Hour		B.27
	Gas	DEP Method 9		Annual	1-Oct	1 Hour		B.27
PM/PM10	Oil	EPA Method 5 or 17		Annual	1-Oct	3 Hours		B.27
SO2 (Sulfur Content of Fuel)	Oil	ASTM D 2880-96		Daily	1-Oct			B.24
	Gas	ASTM D 1072-90(94)E-1 or D 3031-81(86) or D 4084-94 or D 3246-92		Annual				B.24
NOx	Oil	EPA Method 20		Annual	1-Oct		Yes	B.27
	Gas	EPA Method 20		Annual	1-Oct		Yes	B.27
CO	Oil	EPA Method 10		Annual	1-Oct			B.27
	Gas	EPA Method 10		Annual	1-Oct			B.27
CO2							Yes	

Table 2-1, Compliance Requirements

Florida Power & Light Company Martin Plant				Permit No. 0850001-017-AV Facility ID No. 0850001			
E.U. ID No.	Brief Description						
-007	Auxiliary Boiler						
Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date **	Min. Compliance Test Duration	CMS*	See Permit Conditions
VE	Oil	DEP Method 9	Annual	1-Oct	1 Hour		C.13
SO2	Oil	ASTM D 2880-96	Daily				C.11
	Gas	ASTM D 1072-90(94)E-1	Annual	1-Oct			
E.U. ID No.	Brief Description						
-009	Diesel Generator						
Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date **	Min. Compliance Test Duration	CMS*	See Permit Conditions
SO2	Oil	Verification by vendor receipts	On delivery				D.4
E.U. ID No.	Brief Description						
-011	Combined Cycle Unit 8 with SCR System "4-on-1"						
-012							
-017							
-018							
Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date **	Min. Compliance Test Duration	CMS*	See Permit Conditions
PM/PM10	Oil	Fuel Specifications	Annual				H.19
	Gas	Visible Emissions					
SO2	Oil	Verification by vendor receipts	On delivery				H.19
	Gas	ASTM D 2880-71 (oil) D4084-82, D3246-81(gas)					
NOx	Oil	EPA Method 7E and 20	Annual			Yes	H.19, H.21, H.24
	Gas						
VOC	Oil	EPA Method 25 or 25A	Renewal				H.19
	Gas						
CO	Oil	EPA Method 10	Annual			Yes	H.19, H.21, H.24
	Gas						
VE	Oil	EPA Method 9	Annual				H.19
	Gas						
Ammonia***		EPA Method CTM-027	Annual				H.19, H.23, H.26
Notes:							
*CMS [=] Continuous Monitoring System							
**Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.							
*** Additional Ammonia Slip Testing: Refer to Specific Condition H. 23							

APPENDICES

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APPENDIX A

NSPS SUBPART A, IDENTIFICATION OF GENERAL PROVISIONS

Emissions units subject to a New Source Performance Standard of 40 CFR 60 are also subject to the applicable requirements of Subpart A, the General Provisions, including:

- § 60.1 Applicability.
- § 60.2 Definitions.
- § 60.3 Units and abbreviations.
- § 60.4 Address.
- § 60.5 Determination of construction or modification.
- § 60.6 Review of plans.
- § 60.7 Notification and Record Keeping.
- § 60.8 Performance Tests.
- § 60.9 Availability of information.
- § 60.10 State Authority.
- § 60.11 Compliance with Standards and Maintenance Requirements.
- § 60.12 Circumvention.
- § 60.13 Monitoring Requirements.
- § 60.14 Modification.
- § 60.15 Reconstruction.
- § 60.16 Priority List.
- § 60.17 Incorporations by Reference.
- § 60.18 General Control Device Requirements.
- § 60.19 General Notification and Reporting Requirements.

Individual subparts may exempt specific equipment or processes from some or all of these requirements. The general provisions may be provided in full upon request.

APPENDIX AA

NESHAP SUBPART A, IDENTIFICATION OF GENERAL PROVISIONS

Emissions units subject to a National Emissions Standards for Hazardous Air Pollutants for Source Category of 40 CFR 63 are also subject to the applicable requirements of Subpart A, the General Provisions, including:

- § 63.1 Applicability.
- § 63.2 Definitions.
- § 63.3 Units and abbreviations.
- § 63.4 Prohibit activities and circumvention .
- § 63.5 Preconstruction review and notification requirements.
- § 63.6 Compliance with standards and maintenance requirements.
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- § 63.12 State authority and delegations.
- § 63.13 Addresses of State air pollution control agencies and EPA Regional Offices.
- § 63.14 Incorporation by reference.
- § 63.15 Availability of information and confidentiality.

Individual subparts may exempt specific equipment or processes from some or all of these requirements. The general provisions may be provided in full upon request.

APPENDIX BD

FINAL BACT DETERMINATION

OVERVIEW

The project added an 1150 MW "4-on-1" combined cycle gas turbine system to the existing FPL Martin Power Plant. PSD-significant emissions increases required determinations of the Best Available Control Technology (BACT) for carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM₁₀), sulfuric acid mist (SAM), and sulfur dioxide (SO₂), and volatile organic compounds (VOC).

BACT CONTROL TECHNOLOGIES

The Department reviewed available control technologies for each pollutant resulting in a PSD-significant increase. The Department's technical review and rationale for the BACT determinations are presented in the "Technical Evaluation and Preliminary Determination" as revised prior to the siting hearing. The following summarizes the control technologies upon which the Department's final BACT determinations are based.

BACT for CO and VOC Emissions

Good Combustion and Operating Practices: BACT for CO and VOC emissions is the efficient combustion of fuels at high temperatures associated with good combustion design and operating practices. General Electric's dual-fuel combustors have demonstrated very low CO and VOC emissions while simultaneously reducing NOx emissions for gas and oil firing.

BACT for NOx Emissions

DLN Combustion: When firing natural gas under simple cycle mode, BACT for NOx emissions is the operation of General Electric's dry low-NOx (DLN) combustion system. The efficient fuel combustion and thorough mixing of the gas stream reduces hot and cold spots surrounding the combustion zone. The full lean premix combustion results in NOx emissions less than 9 ppmvd when firing natural gas. The Speedtronic™ control system continuously monitors performance parameters and adjusts for efficient operation. The control system also provides for quick automated startups, lean pre-mix combustion performance, and controlled shutdowns.

Wet Injection: When firing distillate oil under simple cycle mode, BACT for NOx emissions is the operation of General Electric's dual-fuel combustor with wet injection designed to reduce the flame temperature and lower NOx emissions.

SCR: When firing natural gas or distillate oil in combined cycle mode, BACT for NOx emissions is the operation of the selective catalytic reduction (SCR) system in conjunction with DLN combustion and wet injection. Ammonia injected into the exhaust gas stream combines with NOx in a reduction action across a catalyst bed to form nitrogen and water. The catalyst bed is located after the HRSG, which reduces exhaust temperatures to the appropriate operating range of the catalyst material. The SCR system will achieve about a 70% reduction with an initial ammonia slip of no more than 5 ppmvd.

BACT for PM, SAM, and SO₂ Emissions

Fuel Specifications: BACT for PM, SAM, and SO₂ emissions is the use of natural gas as the primary fuel (≤ 2.0 grains of sulfur per 100 standard cubic feet of natural gas) and restricted use of very low sulfur distillate oil ($\leq 0.05\%$ sulfur by weight). These fuels are readily combustible and contain little ash, sulfur, or other contaminants.

BACT STANDARDS

The following summarizes the final Best Available Control Technology determinations for this project in accordance with Rule 62-212.400(BACT), F.A.C.

Gas-Fired Fuel Heaters: BACT for emissions of CO, NOx, PM/PM₁₀, SAM, SO₂, and VOC from the gas-fired fuel heaters is the efficient combustion of natural gas and the following visible emissions criteria, "If visible emissions are greater than 5% opacity, the permittee shall investigate the cause, take appropriate corrective actions, and document the incident. This condition does not impose any initial or periodic testing." This condition is similar to that for the previously permitted gas-fired fuel heaters under Permit No. PSD-FL-286.

Cooling Tower: BACT for emissions of PM/PM₁₀ from the cooling tower is a design drift rate of no more than 0.001 percent of the circulating water flow rate.

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FINAL BACT DETERMINATION

Gas Turbines/HRSG Systems

Pollutant	Fuel	Method of Operation	Stack Test, 3-Run Average		CEMS Block Average
			ppmvd @ 15% O2	lb/hour	ppmvd @ 15% O2
CO ^a	Oil	Simple or Combined Cycle	14.4	64.7	15.0, 24-hr
	Gas	Simple Cycle	7.4	27.5	8.0, 24-hr
		Simple Cycle w/PA	12.0	45.0	12.0, 24-hr
		Combined Cycle, Normal	7.4	27.5	10.0, 24-hr
		Combined Cycle, All Modes	NA	NA	
NOx ^b	Oil	Simple Cycle	42.0	319.2	42.0, 3-hr
		Combined Cycle w/SCR	10.0	76.0	10.0, 24-hr
	Gas	Simple Cycle	9.0	58.7	9.0, 24-hr
		Simple Cycle w/PA	12.0	76.2	12.0, 24-hr
		Simple Cycle w/Peaking	15.0	95.3	15.0, 24-hr
		Combined Cycle w/SCR, Normal	2.5	16.3	2.5, 24-hr
		Combined Cycle w/SCR and DB	2.5	23.6	
		Combined Cycle w/SCR, All Modes	NA	NA	
PM/PM10 ^c	Oil/Gas	Simple or Combined Cycle	Fuel Specifications		
		Simple or Combined Cycle	Visible emissions shall not exceed 10% opacity for each 6-minute block average.		
SAM/SO2 ^d	Oil/Gas	Simple or Combined Cycle	Fuel Specifications		
VOC ^e	Oil	Simple or Combined Cycle	2.5	6.0	NA
	Gas	Simple or Normal Combined Cycle	1.3	2.8	NA
		Combined Cycle, w/DB and/or PA	4.0	10.5	NA
Ammonia ^f	Oil/Gas	Combined Cycle w/SCR	5.0	NA	NA

- a. Compliance with the CO standards shall be demonstrated based on data collected by the required CEMS. Compliance may also be determined by EPA Method 10. Compliance with the 24-hour CO CEMS standards shall be determined separately for each method of operation based on the hours of operation for each method. *{Permitting Note: A 24-hour compliance average may be based on as little as 1-hour of CEMS data or as much as 24-hours of CEMS data.}*
- b. Compliance with the NOx standards shall be demonstrated based on data collected by the required CEMS. Compliance may also be determined by EPA Method 7E or 20. NOx mass emission rates are defined as oxides of nitrogen expressed as NO₂. Compliance with the 24-hour NOx CEMS standards during simple cycle operation shall be determined separately for each method of operation based on the hours of operation for each method. *{Permitting Note: A 24-hour compliance average may be based on as little as 1-hour of CEMS data or as much as 24-hours of CEMS data.}*
- c. The fuel specifications established above combined with the efficient combustion design and operation of each gas turbine represents the Best Available Control Technology (BACT) determination for PM/PM₁₀ emissions. Compliance with the fuel specifications, CO standards, and visible emissions standards shall serve as indicators of good combustion. Compliance with the fuel specifications shall be demonstrated by keeping records of the fuel sulfur content. Compliance with the visible emissions standard shall be demonstrated by conducting tests in accordance with EPA Method 9. *{Permitting Note: PM₁₀ emissions for gas firing are estimated at 9 lb/hour for simple cycle operation, 11 lb/hour for combined cycle operation, and 17 lb/hour for combined cycle operation with duct burning. PM₁₀*

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FINAL BACT DETERMINATION

emissions for oil firing are estimated at 17 lb/hour for simple cycle operation and 37 lb/hour for combined cycle operation.}

- d. The fuel sulfur specifications effectively limit the potential emissions of SAM and SO₂ from the gas turbines and represent the Best Available Control Technology (BACT) determination for these pollutants. *{Permitting Note: SO₂ emissions for gas firing are estimated at 9.8 lb/hour for simple and combined cycle operation and 12.8 lb/hour for combined cycle operation with duct burning. SO₂ emissions for oil firing are estimated at 99 lb/hour for simple and combined cycle operation. SAM emissions are estimated to be less than 10% of the SO₂ emissions.}*
- e. Compliance with the VOC standards shall be demonstrated by conducting tests in accordance with EPA Method 25A. Optionally, EPA Method 18 may also be performed to deduct emissions of methane and ethane. The emission standards are based on VOC measured as methane.
- f. Subject to the following testing requirements, each SCR system shall be designed and operated for an initial ammonia slip target of no more than 5.0 ppmvd corrected to 15% oxygen based on the average of three test runs. Compliance with the ammonia slip standard shall be demonstrated by conducting tests in accordance with EPA Method CTC-027.

Additional Ammonia Slip Testing: If the tested ammonia slip rate for a gas turbine exceeds 5.0 ppmvd corrected to 15% oxygen when firing natural gas during the annual test, the permittee shall:

- a. Begin testing and reporting the ammonia slip for each subsequent calendar quarter;
- b. Before the ammonia slip exceeds 7 ppmvd corrected to 15% oxygen, take corrective actions that result in lowering the ammonia slip to less than 5 ppmvd corrected to 15% oxygen; and
- c. Test and demonstrate that the ammonia slip is less than 5 ppmvd corrected to 15% oxygen within 15 days after completing the corrective actions.

Corrective actions may include, but are not limited to, adding catalyst, replacing catalyst, or other SCR system maintenance or repair. After demonstrating that the ammonia slip level is less than 5 ppmvd corrected to 15% oxygen, testing and reporting shall resume on an annual basis. [Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.]

{Permitting Notes: "DB" means duct burning. "PA" means power augmentation. "SCR" means selective catalytic reduction. "NA" means not applicable. The mass emission rate standards are based on a turbine inlet condition of 59° F and may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department. Initial compliance tests under normal conditions for gas and oil firing have already been conducted for the existing Unit 8 gas turbines.}

APPENDIX CF
CITATION FORMAT AND DEFINITIONS

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located
"2222" represents the specific facility ID number
"001" identifies the specific permit project
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the Prevention of Significant Deterioration of Air Quality
"FL" means that the permit was issued by the State of Florida
"317" identifies the specific permit project

RULE CITATION FORMATS

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

DEFINITIONS [RULE 62-210.200, F.A.C.]

- (119) Excess Emissions - Emissions of pollutants in excess of those allowed by any applicable air pollution rule of the Department, or by a permit issued pursuant to any such rule or Chapter 62-4, F.A.C. The term applies only to conditions which occur during startup, shutdown, soot blowing, load changing or malfunction.
- (179) Malfunction - Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.
- (258) Shutdown - The cessation of the operation of an emissions unit for any purpose.
- (275) Startup - The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.

APPENDIX Da

NSPS SUBPART Da REQUIREMENTS FOR DUCT BURNERS

The HRSG duct burners are part of the Unit 8 gas turbine/HRSG systems, which are regulated as Emissions Units 011, 012, 017, and 018.

§ 60.40a Applicability and Designation of Affected Facility.

The HRSG duct burner systems are part of an electric utility steam generating unit that is capable of combusting more than 250 MMBtu per hour heat input of fossil fuel for which construction or modification is commenced after September 18, 1978. Therefore, the requirements of NSPS Subpart Da apply to the HRSG duct burners systems. Only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. Emissions from the gas turbines are subject to the requirements of NSPS Subpart GG. The HRSG duct burner systems are also subject to the applicable requirements of the General Provisions in Subpart A.

§ 60.41a Definitions.

"Duct burner" means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.

"Electric utility combined cycle gas turbine" means any combined cycle gas turbine used for electric generation that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam distribution system that is constructed for the purpose of providing steam to a steam electric generator that would produce electrical power for sale is also considered in determining the electrical energy output capacity of the affected facility.

"Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

"Fossil fuel" means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such material for the purpose of creating useful heat.

"Gross output" means the gross useful work performed by the steam generated. For units generating only electricity, the gross useful work performed is the gross electrical output from the turbine/generator set. For cogeneration units, the gross useful work performed is the gross electrical output plus one half the useful thermal output (i.e., steam delivered to an industrial process).

"Potential electrical output capacity" is defined as 33 percent of the maximum design heat input capacity of the steam generating unit (e.g., a steam generating unit with a 100-MW (340 million Btu/hr) fossil-fuel heat input capacity would have a 33-MW potential electrical output capacity). For electric utility combined cycle gas turbines the potential electrical output capacity is determined on the basis of the fossil-fuel firing capacity of the steam generator exclusive of the heat input and electrical power contribution by the gas turbine.

"Steam generating unit" means any furnace, boiler, or other device used for combusting fuel for the purpose of producing steam (including fossil-fuel-fired steam generators associated with combined cycle gas turbines; nuclear steam generators are not included).

§ 60.42a Standard for Particulate Matter.

§ 60.42a(a)(1) establishes a particulate matter limit of 0.03 lb/MMBtu heat input from the combustion of gaseous fuel and an opacity limit of 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Natural gas is the primary fuel for the gas turbines with very low sulfur distillate oil as a backup fuel. Natural gas is the exclusive fuel for the duct burner systems. As the worst case, the maximum PM/PM₁₀ emissions are expected to be less than 0.01 lb/MMBtu heat input from firing distillate oil in the gas turbine and natural gas in the duct burners. The stack opacity is limited by permit to 10% or less. Therefore, the Department determines that compliance with the conditions of the PSD permit ensure compliance with the requirements of NSPS Subpart Da.

APPENDIX Da

NSPS SUBPART Da REQUIREMENTS FOR DUCT BURNERS

§ 60.43a Standard for Sulfur Dioxide.

In accordance with § 60.43a(b)(2), sulfur dioxide emissions shall not exceed 0.20 lb/MMBtu heat input from the combustion of gaseous fuel for uncontrolled sources. Natural gas is the primary fuel for the gas turbines with very low sulfur distillate oil ($\leq 0.05\%$ sulfur by weight) as a backup fuel. Natural gas is the exclusive fuel for the duct burner systems. As the worst case, the maximum SO₂ emissions are expected to be less than 0.05 lb/MMBtu heat input from firing distillate oil in the gas turbine and natural gas in the duct burners. Therefore, the Department determines that compliance with the conditions of the PSD permit ensure compliance with the requirements of NSPS Subpart Da.

§ 60.44a Standard for Nitrogen Oxides.

In accordance with § 60.44a(d)(1), nitrogen oxides (expressed as NO₂) from a gas turbine/HRSG system with duct burners shall not exceed 1.6 pounds per megawatt-hour gross energy output. The permittee shall demonstrate compliance with this requirement based upon an initial test. Thereafter, compliance with the BACT standards of the PSD permit will demonstrate compliance with the NSPS Subpart Da limit. After investigation, if there is good reason to believe that this standard is being violated, the Department may require subsequent compliance testing in accordance with Rule 62-297.310(7)(b), F.A.C.

§ 60.46a Compliance Provisions.

The HRSG duct burner systems are restricted to the exclusive firing of natural gas. The maximum expected emissions of particulate matter and sulfur dioxide are much lower than the limits established by this subpart. Therefore, no testing is required to demonstrate compliance with the standards specified in § 60.42a (particulate matter) and § 60.43a (sulfur dioxide). Compliance with the opacity limit of 10% established in the PSD permit ensures compliance with the NSPS opacity standard.

In accordance with § 60.46a(k)(1), compliance with the nitrogen oxides (NO_x) standard specified in § 60.44a(d)(1) for duct burners used in combined cycle systems shall be determined as follows:

$$E = [(C_{sg} \times Q_{sg}) - (C_{te} \times Q_{te})] / (O_{sg} \times h) \quad (\text{Equation 1})$$

Where:

- E = Emission rate of NO_x from the duct burner, ng/J (lb/Mwh) gross output
- C_{sg} = Average hourly concentration of NO_x exiting the steam generating unit, ng/ dscm (lb/dscf)
- C_{te} = Average hourly concentration of NO_x in the turbine exhaust upstream from duct burner, ng/dscm (lb/dscf)
- Q_{sg} = Average hourly volumetric flow rate of exhaust gas from steam generating unit, dscm/hr (dscf/hr)
- Q_{te} = Average hourly volumetric flow rate of exhaust gas from combustion turbine, dscm/hr (dscf/hr)
- O_{sg} = Average hourly gross energy output from steam generating unit, J (Mwh)
- h = Average hourly fraction of the total heat input to the steam generating unit de-rived from the combustion of fuel in the affected duct burner

Method 7E of Appendix A of Part 60 shall be used to determine the NO_x concentrations (C_{sg} and C_{te}). Method 2, 2F or 2G of Appendix A of Part 60, as appropriate, shall be used to determine the volumetric flow rates (Q_{sg} and Q_{te}) of the exhaust gases. The volumetric flow rate measurements shall be taken at the same time as the concentration measurements:

The owner or operator shall develop, demonstrate, and provide information satisfactory to the Administrator to determine the average hourly gross energy output from the steam generating unit, and the average hourly percentage of the total heat input to the steam generating unit derived from the combustion of fuel in the affected duct burner.

Compliance with the emissions limits under § 60.44a(d)(1) is determined by the three-run average (nominal 1- hour runs) for the initial performance tests. Thereafter, compliance with the NO_x limits established in the PSD permit shall demonstrate compliance with NO_x limit specified in NSPS Subpart Da.

In accordance with § 60.46a(k)(3), when an affected duct burner steam generating unit utilizes a common steam turbine with one or more affected duct burner steam generating units, the owner or operator shall either:

APPENDIX Da

NSPS SUBPART Da REQUIREMENTS FOR DUCT BURNERS

Determine compliance with the applicable NO_x emissions limits by measuring the emissions combined with the emissions from the other units utilizing the common steam turbine; or

Develop, demonstrate, and provide information satisfactory to the Administrator on methods for apportioning the combined gross energy output from the steam turbine for each of the affected duct burners. The Administrator may approve such demonstrated substitute methods for apportioning the combined gross energy output measured at the steam turbine whenever the demonstration ensures accurate estimation of emissions regulated under Part 60.

§ 60.47a Emission Monitoring.

In accordance with § 60.47a(o), the owner or operator of a duct burner, as described in § 60.41a, which is subject to the NO_x standards of § 60.44a(a)(1) or (d)(1) is not required to install or operate a continuous emissions monitoring system to measure NO_x emissions; a wattmeter to measure gross electrical output; meters to measure steam flow, temperature, and pressure; and a continuous flow monitoring system to measure the flow of exhaust gases discharged to the atmosphere.

§ 60.48a Compliance Determination Procedures and Methods.

In accordance with § 60.48a (d)(1), EPA Method 19 shall be used to determine the NO_x emission rate when demonstrating compliance with the NO_x standard specified in § 60.44a. In accordance with § 60.48a(f), electric utility combined cycle gas turbines are performance tested for particulate matter, sulfur dioxide, and nitrogen oxides using the procedures of Method 19. The sulfur dioxide and nitrogen oxides emission rates from the gas turbine used in Method 19 calculations are determined when the gas turbine is performance tested under subpart GG. The potential uncontrolled particulate matter emission rate from a gas turbine is defined as 17 ng/J (0.04 lb/million Btu) heat input.

§ 60.49a Reporting requirements.

Compliance with reporting requirements of the PSD permit ensure compliance with the requirements of NSPS Subpart Da.

APPENDIX GG

NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

The Unit 8 gas turbines are regulated as Emissions Units 011, 012, 017, and 018.

The Unit 3 and 4 gas turbines are regulated as Emissions Units 003, 004, 005 and 006.

Updated 4/27/06

Source [44 FR 52798, Sept. 10, 1979, as amended at 52 FR 42434, Nov. 5, 1987; 65 FR 61759, Oct. 17, 2000; 69 FR 41346, July 8, 2004]

Subpart GG-Standards of Performance for Stationary Gas Turbines

§ 60.330 Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired.

(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of § 60.332.

§ 60.331 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

(a) Stationary gas turbine means any simple cycle gas turbine, regenerative cycle gas turbine or any gas turbine portion of a combined cycle steam/electric generating system that is not self propelled. It may, however, be mounted on a vehicle for portability.

(b) Simple cycle gas turbine means any stationary gas turbine which does not recover heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine, or which does not recover heat from the gas turbine exhaust gases to heat water or generate steam.

(c) Regenerative cycle gas turbine means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine.

(d) Combined cycle gas turbine means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to heat water or generate steam.

(e) Emergency gas turbine means any stationary gas turbine which operates as a mechanical or electrical power source only when the primary power source for a facility has been rendered inoperable by an emergency situation.

(f) Ice fog means an atmospheric suspension of highly reflective ice crystals.

(g) ISO standard day conditions means 288 degrees Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.

(h) Efficiency means the gas turbine manufacturer's rated heat rate at peak load in terms of heat input per unit of power output based on the lower heating value of the fuel.

(i) Peak load means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.

(j) Base load means the load level at which a gas turbine is normally operated.

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NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

- (k) Fire-fighting turbine means any stationary gas turbine that is used solely to pump water for extinguishing fires.
- (l) Turbines employed in oil/gas production or oil/gas transportation means any stationary gas turbine used to provide power to extract crude oil/natural gas from the earth or to move crude oil/natural gas, or products refined from these substances through pipelines.
- (m) A Metropolitan Statistical Area or MSA as defined by the Department of Commerce.
- (n) Offshore platform gas turbines means any stationary gas turbine located on a platform in an ocean.
- (o) Garrison facility means any permanent military installation.
- (p) Gas turbine model means a group of gas turbines having the same nominal air flow, combustor inlet pressure, combustor inlet temperature, firing temperature, turbine inlet temperature and turbine inlet pressure.
- (q) Electric utility stationary gas turbine means any stationary gas turbine constructed for the purpose of supplying more than one-third of its potential electric output capacity to any utility power distribution system for sale.
- (r) Emergency fuel is a fuel fired by a gas turbine only during circumstances, such as natural gas supply curtailment or breakdown of delivery system, that make it impossible to fire natural gas in the gas turbine.
- (s) Unit operating hour means a clock hour during which any fuel is combusted in the affected unit. If the unit combusts fuel for the entire clock hour, it is considered to be a full unit operating hour. If the unit combusts fuel for only part of the clock hour, it is considered to be a partial unit operating hour.
- (t) Excess emissions means a specified averaging period over which either:
- (1) The NO_x emissions are higher than the applicable emission limit in Sec. 60.332;
 - (2) The total sulfur content of the fuel being combusted in the affected facility exceeds the limit specified in Sec. 60.333; or
 - (3) The recorded value of a particular monitored parameter is outside the acceptable range specified in the parameter monitoring plan for the affected unit.
- (u) Natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Equivalents of this in other units are as follows: 0.068 weight percent total sulfur, 680 parts per million by weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20 degrees Celsius total sulfur. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 British thermal units (Btu) per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.
- (v) Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.
- (w) Lean premix stationary combustion turbine means any stationary combustion turbine where the air and fuel are thoroughly mixed to form a lean mixture for combustion in the combustor. Mixing may occur before or in the combustion chamber. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.

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NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

(x) Diffusion flame stationary combustion turbine means any stationary combustion turbine where fuel and air are injected at the combustor and are mixed only by diffusion prior to ignition. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.

(y) Unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

§ 60.332 Standard for nitrogen oxides.

(a) On and after the date on which the performance test required by § 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (b), (c), and (d) of this section shall comply with one of the following, except as provided in paragraphs (e), (f), (g), (h), (i), (j), (k), and (l) of this section.

(1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in Sec. 60.335(b)(1)) NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

(2) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in Sec. 60.335(b)(1)) NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

(3) The use of F in paragraphs (a)(1) and (2) of this section is optional. That is, the owner or operator may choose to apply a NO_x allowance for fuel-bound nitrogen and determine the appropriate F-value in accordance with paragraph (a)(4) of this section or may accept an F-value of zero.

(4) If the owner or operator elects to apply a NO_x emission allowance for fuel-bound nitrogen, F shall be defined according to the nitrogen content of the fuel during the most recent performance test required under Sec. 60.8 as follows:

Fuel-bound nitrogen (% by weight)	F (NO _x % by volume)
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NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

$N \leq 0.015$	0
$0.015 < N \leq 0.1$	$0.04(N)$
$0.1 < N \leq 0.25$	$0.004 + 0.0067(N - 0.1)$
$N > 0.25$	0.005

Where:

N = the nitrogen content of the fuel (percent by weight).or:

Manufacturers may develop and submit to EPA custom fuel-bound nitrogen allowances for each gas turbine model they manufacture. These fuel-bound nitrogen allowances shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by Sec. 60.8. Notices of approval of custom fuel-bound nitrogen allowances will be published in the Federal Register.

(b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.

(c) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph (a)(2) of this section.

(d) Stationary gas turbines with a manufacturer's rated base load at ISO conditions of 30 megawatts or less except as provided in § 60.332(b) shall comply with paragraph (a)(2) of this section.

(e) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from paragraph (a) of this section.

(f) Stationary gas turbines using water or steam injection for control of NO_x emissions are exempt from paragraph (a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.

(g) Emergency gas turbines, military gas turbines for use in other than a garrison facility, military gas turbines installed for use as military training facilities, and fire fighting gas turbines are exempt from paragraph (a) of this section.

(h) Stationary gas turbines engaged by manufacturers in research and development of equipment for both gas turbine emission control techniques and gas turbine efficiency improvements are exempt from paragraph (a) on a case-by-case basis as determined by the Administrator.

(i) Exemptions from the requirements of paragraph (a) of this section will be granted on a case-by-case basis as determined by the Administrator in specific geographical areas where mandatory water restrictions are required by governmental agencies because of drought conditions. These exemptions will be allowed only while the mandatory water restrictions are in effect.

(j) Stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour that commenced construction, modification, or reconstruction between the dates of October 3, 1977, and January 27, 1982, and were required in the September 10, 1979, Federal Register (44 FR 52792) to comply with paragraph (a)(1) of this section, except electric utility stationary gas turbines, are exempt from paragraph (a) of this section.

(k) Stationary gas turbines with a heat input greater than or equal to 10.7 gigajoules per hour (10 million Btu/hour) when fired with natural gas are exempt from paragraph (a)(2) of this section when being fired with an emergency fuel.

(l) Regenerative cycle gas turbines with a heat input less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) are exempt from paragraph (a) of this section.

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§ 60.333 Standard for sulfur dioxide.

On and after the date on which the performance test required to be conducted by § 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions:

(a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.

(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

§ 60.334 Monitoring of operations.

(a) Except as provided in paragraph (b) of this section, the owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water or steam injection to control NO_x emissions shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine.

(b) The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NO_x emissions may, as an alternative to operating the continuous monitoring system described in paragraph (a) of this section, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_x and O₂ monitors. As an alternative, a CO₂ monitor may be used to adjust the measured NO_x concentrations to 15 percent O₂ by either converting the CO₂ hourly averages to equivalent O₂ concentrations using Equation F-14a or F-14b in appendix F to part 75 of this chapter and making the adjustments to 15 percent O₂, or by using the CO₂ readings directly to make the adjustments, as described in Method 20. If the option to use a CEMS is chosen, the CEMS shall be installed, certified, maintained and operated as follows:

(1) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO_x and diluent monitors may be performed individually or on a combined basis, i.e., the relative accuracy tests of the CEMS may be performed either:

(i) On a ppm basis (for NO_x) and a percent O₂ basis for oxygen; or

(ii) On a ppm at 15 percent O₂ basis; or

(iii) On a ppm basis (for NO_x) and a percent CO₂ basis (for a CO₂ monitor that uses the procedures in Method 20 to correct the NO_x data to 15 percent O₂).

(2) As specified in Sec. 60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.

(3) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in Sec. 60.13(h).

(i) For each unit operating hour in which a valid hourly average, as described in paragraph (b)(2) of this section, is obtained for both NO_x and diluent, the data acquisition and handling system must calculate and record the hourly NO_x emissions in the units of the applicable NO_x emission standard under Sec. 60.332(a), i.e., percent NO_x by volume, dry basis, corrected to 15 percent O₂ and International Organization for Standardization (ISO) standard conditions (if required as given in Sec. 60.335(b)(1)). For any hour in which the hourly average O₂ concentration exceeds 19.0 percent O₂, a diluent cap value of 19.0 percent O₂ may be used in the emission calculations.

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(ii) A worst case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (H_o), minimum ambient temperature (T_a), and minimum combustor inlet absolute pressure (P_o) into the ISO correction equation.

(iii) If the owner or operator has installed a NO_x CEMS to meet the requirements of part 75 of this chapter, and is continuing to meet the ongoing requirements of part 75 of this chapter, the CEMS may be used to meet the requirements of this section, except that the missing data substitution methodology provided for at 40 CFR part 75, subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in Sec. 60.7(c).

(c) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NO_x emissions, the owner or operator may, but is not required to, for purposes of determining excess emissions, use a CEMS that meets the requirements of paragraph (b) of this section. Also, if the owner or operator has previously submitted and received EPA, State, or local permitting authority approval of a procedure for monitoring compliance with the applicable NO_x emission limit under Sec. 60.332, that approved procedure may continue to be used.

(d) The owner or operator of any new turbine constructed after July 8, 2004, and which uses water or steam injection to control NO_x emissions may elect to use either the requirements in paragraph (a) of this section for continuous water or steam to fuel ratio monitoring or may use a NO_x CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section.

(e) The owner or operator of any new turbine that commences construction after July 8, 2004, and which does not use water or steam injection to control NO_x emissions, may, but is not required to, elect to use a NO_x CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section. Other acceptable monitoring approaches include periodic testing approved by EPA or the State or local permitting authority or continuous parameter monitoring as described in paragraph (f) of this section.

(f) The owner or operator of a new turbine that commences construction after July 8, 2004, which does not use water or steam injection to control NO_x emissions may, but is not required to, perform continuous parameter monitoring as follows:

(1) For a diffusion flame turbine without add-on selective catalytic reduction controls (SCR), the owner or operator shall define at least four parameters indicative of the unit's NO_x formation characteristics and shall monitor these parameters continuously.

(2) For any lean premix stationary combustion turbine, the owner or operator shall continuously monitor the appropriate parameters to determine whether the unit is operating in low- NO_x mode.

(3) For any turbine that uses SCR to reduce NO_x emissions, the owner or operator shall continuously monitor appropriate parameters to verify the proper operation of the emission controls.

(4) For affected units that are also regulated under part 75 of this chapter, if the owner or operator elects to monitor NO_x emission rate using the methodology in appendix E to part 75 of this chapter, or the low mass emissions methodology in Sec. 75.19 of this chapter, the requirements of this paragraph (f) may be met by performing the parametric monitoring described in section 2.3 of appendix E or in Sec. 75.19(c)(1)(iv)(H) of this chapter.

(g) The steam or water to fuel ratio or other parameters that are continuously monitored as described in paragraphs (a), (d) or (f) of this section shall be monitored during the performance test required under Sec. 60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO_x emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan. For affected units that are also subject to part 75 of this chapter and that use the low mass emissions methodology in Sec. 75.19 of this chapter or the NO_x emission measurement methodology in appendix E to part 75, the owner or operator may meet the requirements of this paragraph by developing and keeping on-site (or at a central location for unmanned facilities) a quality-assurance plan, as described in Sec. 75.19 (e)(5) or in section 2.3 of appendix E and section 1.3.6 of appendix B to part 75 of this chapter.

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(h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:

(1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (h)(3) of this section. The sulfur content of the fuel must be determined using total sulfur methods described in Sec. 60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference-see Sec. 60.17), which measure the major sulfur compounds may be used; and

(2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (i.e., if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in Sec. 60.332). The nitrogen content of the fuel shall be determined using methods described in Sec. 60.335(b)(9) or an approved alternative.

(3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in Sec. 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

(i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

(ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

(4) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.

(i) The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows:

(1) Fuel oil. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day.

(2) Gaseous fuel. Any applicable nitrogen content value of the gaseous fuel shall be determined and recorded once per unit operating day. For owners and operators that elect not to demonstrate sulfur content using options in paragraph (h)(3) of this section, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.

(3) Custom schedules. Notwithstanding the requirements of paragraph (i)(2) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (i)(3)(i) and (i)(3)(ii) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in Sec. 60.333.

(i) The two custom sulfur monitoring schedules set forth in paragraphs (i)(3)(i)(A) through (D) and in paragraph (i)(3)(ii) of this section are acceptable, without prior Administrative approval:

(A) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (i)(3)(i)(B), (C), or (D) of this section, as applicable.

(B) If none of the 30 daily measurements of the fuel's total sulfur content exceeds 0.4 weight percent (4000 ppmw), subsequent sulfur content monitoring may be performed at 12 month intervals. If any of the samples taken at 12-month intervals has a total sulfur content between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), follow the procedures in paragraph (i)(3)(i)(C) of this section. If any measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section.

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(C) If at least one of the 30 daily measurements of the fuel's total sulfur content is between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), but none exceeds 0.8 weight percent (8000 ppmw), then:

(1) Collect and analyze a sample every 30 days for three months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(2) of this section.

(2) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(3) of this section.

(3) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, continue to monitor at this frequency.

(D) If a sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), immediately begin daily monitoring according to paragraph (i)(3)(i)(A) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than 0.8 weight percent (8000 ppmw), are obtained. At that point, the applicable procedures of paragraph (i)(3)(i)(B) or (C) of this section shall be followed.

(ii) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of this chapter to determine a custom sulfur sampling schedule, as follows:

(A) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf (i.e., the maximum total sulfur content of natural gas as defined in Sec. 60.331(u)), no additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart.

(B) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds 0.4 weight percent (4000 ppmw), then the minimum required sampling frequency shall be one sample at 12 month intervals.

(C) If any sample result exceeds 0.4 weight percent sulfur (4000 ppmw), but none exceeds 0.8 weight percent sulfur (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(C) of this section.

(D) If the sulfur content of any of the 720 hourly samples exceeds 0.8 weight percent (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(D) of this section.

(j) For each affected unit that elects to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with Sec. 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under Sec. 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:

(1) Nitrogen oxides.

(i) For turbines using water or steam to fuel ratio monitoring:

(A) An excess emission shall be any unit operating hour for which the average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with Sec. 60.332, as established during the performance test required in Sec. 60.8. Any unit operating hour in which no water or steam is injected into the turbine shall also be considered an excess emission.

(B) A period of monitor downtime shall be any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.

(C) Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, and (if applicable) the nitrogen content of the fuel during each excess emission. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in Sec. 60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of Sec. 60.335(b)(1).

(ii) If the owner or operator elects to take an emission allowance for fuel bound nitrogen, then excess emissions and periods of monitor downtime are as described in paragraphs (j)(1)(i)(A) and (B) of this section.

(A) An excess emission shall be the period of time during which the fuel-bound nitrogen (N) is greater than the value measured during the performance test required in Sec. 60.8 and used to determine the allowance. The excess emission begins on the date and hour of the sample which shows that N is greater than the

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performance test value, and ends with the date and hour of a subsequent sample which shows a fuel nitrogen content less than or equal to the performance test value.

(B) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour that a required sample is taken, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

(iii) For turbines using NO_x and diluent CEMS:

(A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO_x concentration exceeds the applicable emission limit in Sec. 60.332(a)(1) or (2). For the purposes of this subpart, a "4-hour rolling average NO_x concentration" is the arithmetic average of the average NO_x concentration measured by the CEMS for a given hour (corrected to 15 percent O₂ and, if required under Sec. 60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NO_x concentrations immediately preceding that unit operating hour.

(B) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO_x concentration or diluent (or both).

(C) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in Sec. 60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of Sec. 60.335(b)(1).

(iv) For owners or operators that elect, under paragraph (f) of this section, to monitor combustion parameters or parameters that document proper operation of the NO_x emission controls:

(A) An excess emission shall be a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.

(B) A period of monitor downtime shall be a unit operating hour in which any of the required parametric data are either not recorded or are invalid.

(2) Sulfur dioxide. If the owner or operator is required to monitor the sulfur content of the fuel under paragraph (h) of this section:

(i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

(ii) If the option to sample each delivery of fuel oil has been selected, the owner or operator shall immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.8 weight percent. The owner or operator shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to paragraph (j)(2)(i) of this section. When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option.

(iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.

(3) *Ice fog*. Each period during which an exemption provided in § 60.332(f) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.

(4) *Emergency fuel*. Each period during which an exemption provided in § 60.332(k) is in effect shall be included in the report required in § 60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.

(5) All reports required under Sec. 60.7(c) shall be postmarked by the 30th day following the end of each 6-month period.

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Sec. 60.335 Test methods and procedures.

(a) The owner or operator shall conduct the performance tests required in Sec. 60.8, using either

(1) EPA Method 20,

(2) ASTM D6522-00 (incorporated by reference, see Sec. 60.17), or

(3) EPA Method 7E and either EPA Method 3 or 3A in appendix A to this part, to determine NO_x and diluent concentration.

(4) Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall be performed with a traversing single-hole probe or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

(5) Notwithstanding paragraph (a)(4) of this section, the owner or operator may test at few points than are specified in Method 1 or Method 20 if the following conditions are met:

(i) You may perform a stratification test for NO_x and diluent pursuant to

(A) [Reserved]

(B) The procedures specified in section 6.5.6.1(a) through (e) appendix A to part 75 of this chapter.

(ii) Once the stratification sampling is completed, the owner or operator may use the following alternative sample point selection criteria for the performance test:

(A) If each of the individual traverse point NO_x concentrations, normalized to 15 percent O₂, is within 10 percent of the mean normalized concentration for all traverse points, then you may use 3 points (located either 16.7, 50.0, and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The 3 points shall be located along the measurement line that exhibited the highest average normalized NO_x concentration during the stratification test; or

(B) If each of the individual traverse point NO_x concentrations, normalized to 15 percent O₂, is within 5 percent of the mean normalized concentration for all traverse points, then you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid.

(6) Other acceptable alternative reference methods and procedures are given in paragraph (c) of this section.

(b) The owner or operator shall determine compliance with the applicable nitrogen oxides emission limitation in Sec. 60.332 and shall meet the performance test requirements of Sec. 60.8 as follows:

(1) For each run of the performance test, the mean nitrogen oxides emission concentration (NO_{xo}) corrected to 15 percent O₂ shall be corrected to ISO standard conditions using the following equation. Notwithstanding this requirement, use of the ISO correction equation is optional for: Lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSG) equipped with duct burners; and units equipped with add-on emission control devices:

$$\text{NO}_x = (\text{NO}_{x_o}) (P_r/P_o)^{0.5} e^{19(H_o - 0.00633)} (288[\text{deg}]\text{K}/T_a)^{1.53}$$

Where:

NO_x = emission concentration of NO_x at 15 percent O₂ and ISO standard ambient conditions, ppm by volume, dry basis,

NO_{xo} = mean observed NO_x concentration, ppm by volume, dry basis, at 15 percent O₂,

P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg,

P_o = observed combustor inlet absolute pressure at test, mm Hg,

H_o = observed humidity of ambient air, g H₂O/g air,

e = transcendental constant, 2.718, and

T_a = ambient temperature, [deg]K.

(2) The 3-run performance test required by Sec. 60.8 must be performed within 5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or

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backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in Sec. 60.331).

(3) For a combined cycle turbine system with supplemental heat (duct burner), the owner or operator may elect to measure the turbine NO_x emissions after the duct burner rather than directly after the turbine. If the owner or operator elects to use this alternative sampling location, the applicable NO_x emission limit in Sec. 60.332 for the combustion turbine must still be met.

(4) If water or steam injection is used to control NO_x with no additional post-combustion NO_x control and the owner or operator chooses to monitor the steam or water to fuel ratio in accordance with Sec. 60.334(a), then that monitoring system must be operated concurrently with each EPA Method 20, ASTM D6522-00 (incorporated by reference, see Sec. 60.17), or EPA Method 7E run and shall be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable Sec. 60.332 NO_x emission limit.

(5) If the owner operator elects to claim an emission allowance for fuel bound nitrogen as described in Sec. 60.332, then concurrently with each reference method run, a representative sample of the fuel used shall be collected and analyzed, following the applicable procedures described in Sec. 60.335(b)(9). These data shall be used to determine the maximum fuel nitrogen content for which the established water (or steam) to fuel ratio will be valid.

(6) If the owner or operator elects to install a CEMS, the performance evaluation of the CEMS may either be conducted separately (as described in paragraph (b)(7) of this section) or as part of the initial performance test of the affected unit.

(7) If the owner or operator elects to install and certify a NO_x CEMS under Sec. 60.334(e), then the initial performance test required under Sec. 60.8 may be done in the following alternative manner:

(i) Perform a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load.

(ii) Use the test data both to demonstrate compliance with the applicable NO_x emission limit under Sec. 60.332 and to provide the required reference method data for the RATA of the CEMS described under Sec. 60.334(b).

(iii) The requirement to test at three additional load levels is waived.

(8) If the owner or operator elects under Sec. 60.334(f) to monitor combustion parameters or parameters indicative of proper operation of NO_x emission controls, the appropriate parameters shall be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in Sec. 60.334(g).

(9) To determine the fuel bound nitrogen content of fuel being fired (if an emission allowance is claimed for fuel bound nitrogen), the owner or operator may use equipment and procedures meeting the requirements of:

(i) For liquid fuels, ASTM D2597-94 (Reapproved 1999), D6366-99, D4629-02, D5762-02 (all of which are incorporated by reference, see Sec. 60.17); or

(ii) For gaseous fuels, shall use analytical methods and procedures that are accurate to within 5 percent of the instrument range and are approved by the Administrator.

(10) If the owner or operator is required under Sec. 60.334(i)(1) or (3) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using:

(i) For liquid fuels, ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00 or D1552-01 (all of which are incorporated by reference, see Sec. 60.17); or

(ii) For gaseous fuels, ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 (all of which are incorporated by reference, see Sec. 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator.

(11) The fuel analyses required under paragraphs (b)(9) and (b)(10) of this section may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

(c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

APPENDIX GG

NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

(1) Instead of using the equation in paragraph (b)(1) of this section, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in Sec. 60.8 to ISO standard day conditions.

PSD-FL-327 Permit Monitoring of Operations

The PSD permit requires keeping monthly records of the fuel sulfur content of natural gas. Appropriate test methods are also specified in the PSD permit. These requirements constitute a custom fuel monitoring schedule that ensures compliance with the NSPS requirements for monitoring the nitrogen and sulfur contents of the fuels. The requirement to monitor the nitrogen contents of these fuels is waived due to negligible concentrations and the PSD conditions that require compliance with the NO_x standards to be demonstrated by CEMS. The CEMS shall be installed, operated, and maintained in accordance with the requirements of the PSD permit.

For the purpose of reports required under § 60.7(c), periods of excess emissions that shall be reported are: any 1-hour period of NO_x emissions greater than the NSPS standard; and any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% sulfur by weight (for sulfur dioxide emissions). The permittee shall submit a semiannual report of emissions in excess of the NSPS standards.

PSD-FL-327 Permit Test Methods and Procedures

Tests for nitrogen oxides emissions shall be conducted in accordance with the schedule and methods specified in the PSD permit. The permittee is allowed to conduct initial performance tests at a single load because a NO_x monitor shall be used to demonstrate compliance with the specified NO_x limits. The permittee is allowed to make the initial compliance demonstration for NO_x emissions using certified CEMS data, provided that compliance is based on a minimum of three test runs representing a total of at least three hours of data, and that the CEMS be calibrated in accordance with the procedure in section 6.2.3 of Method 20 following each run. Alternatively, initial compliance may be demonstrated using data collected during the initial relative accuracy test audit (RATA) performed on the NO_x monitor. The permittee is not required to have the NO_x monitor continuously correct NO_x emissions concentrations to ISO conditions. However, the permittee shall make the correction when required by the Department or Administrator.

The permittee shall use the methods specified in the PSD permit to demonstrate compliance with the fuel sulfur specification, which will ensure compliance with the NSPS standard.

APPENDIX SC
STANDARD CONDITIONS

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at this facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]
8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

10. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

APPENDIX SC
STANDARD CONDITIONS

11. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
12. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
13. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
 - a. Required Sampling Time. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
 - b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.[Rule 62-297.310(4), F.A.C.]
14. Determination of Process Variables
 - a. Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
 - b. Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.[Rule 62-297.310(5), F.A.C.]
15. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
16. Test Notification: The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]
17. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
18. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide

APPENDIX SC
STANDARD CONDITIONS

sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

- 1) The type, location, and designation of the emissions unit tested.
- 2) The facility at which the emissions unit is located.
- 3) The owner or operator of the emissions unit.
- 4) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
- 5) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
- 6) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8) The date, starting time and duration of each sampling run.
- 9) The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10) The number of points sampled and configuration and location of the sampling plane.
- 11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12) The type, manufacturer and configuration of the sampling equipment used.
- 13) Data related to the required calibration of the test equipment.
- 14) Data on the identification, processing and weights of all filters used.
- 15) Data on the types and amounts of any chemical solutions used.
- 16) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18) All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19) The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20) The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

RECORDS AND REPORTS

19. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
20. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

APPENDIX DDDDD

NESHAPS REQUIREMENTS FOR INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL BOILERS AND PROCESS HEATERS

The auxiliary boiler is subject to the applicable requirements of this 40 CFR 63, Subpart DDDDD. The provisions of this Subpart may be provided in full upon request.

Source: Federal Register Dated 9/12/04

What This Subpart Covers

63.7480 What is the purpose of this subpart?

63.7485 Am I subject to this subpart?

63.7490 What is the affected source of this subpart?

63.7491 Are any boilers or process heaters not subject to this subpart?

63.7495 When do I have to comply with this subpart?

Emission Limits and Work Practice Standards

63.7499 What are the subcategories of boilers and process heaters?

63.7500 What emission limits, work practice standards, and operating limits must I meet?

General Compliance Requirements

63.7505 What are my general requirements for complying with this subpart?

63.7506 Do any boilers or process heaters have limited requirements?

63.7507 What are the health-based compliance alternatives for the hydrogen chloride (HCl) and total selected metals (TSM) standards?

Testing, Fuel Analyses, and Initial Compliance Requirements

63.7510 What are my initial compliance requirements and by what date must I conduct them?

63.7515 When must I conduct subsequent performance tests or fuel analyses?

63.7520 What performance tests and procedures must I use?

63.7521 What fuel analyses and procedures must I use?

63.7522 Can I use emission averaging to comply with this subpart?

63.7525 What are my monitoring, installation, operation, and maintenance requirements?

63.7530 How do I demonstrate initial compliance with the emission limits and work practice standards?

Continuous Compliance Requirements

63.7535 How do I monitor and collect data to demonstrate continuous compliance?

63.7540 How do I demonstrate continuous compliance with the emission limits and work practice standards?

63.7541 How do I demonstrate continuous compliance under the emission averaging provision?

Notifications, Reports, and Records

63.7545 What notifications must I submit and when?

63.7550 What reports must I submit and when?

63.7555 What records must I keep?

63.7560 In what form and how long must I keep my records?

Other Requirements and Information

63.7565 What parts of the General Provisions apply to me?

63.7570 Who implements and enforces this subpart?

63.7575 What definitions apply to this subpart?

APPENDIX DDDDD

Tables to Subpart DDDDD of Part 63

Table 1 to Subpart DDDDD of Part 63--Emission Limits and Work Practice Standards

Table 2 to Subpart DDDDD of Part 63--Operating Limits for Boilers and Process Heaters With Particulate Matter Emission Limits

Table 3 to Subpart DDDDD of Part 63--Operating Limits for Boilers and Process Heaters With Mercury Emission Limits and Boilers and Process Heaters That Choose to Comply With the Alternative Total Selected Metals Emission Limits

Table 4 to Subpart DDDDD of Part 63--Operating Limits for Boilers and Process Heaters With Hydrogen Chloride Emission Limits

Table 5 to Subpart DDDDD of Part 63--Performance Testing Requirements

Table 6 to Subpart DDDDD of Part 63--Fuel Analysis Requirements

Table 7 to Subpart DDDDD of Part 63--Establishing Operating Limits

Table 8 to Subpart DDDDD of Part 63--Demonstrating Continuous Compliance

Table 9 to Subpart DDDDD of Part 63--Reporting Requirements

Table 10 to Subpart DDDDD of Part 63--Applicability of General Provisions to Subpart DDDDD (See Appendix B)

Appendices to Subpart DDDDD

Appendix A to Subpart DDDDD--Methodology and Criteria for Demonstrating Eligibility for the Health-Based Compliance Alternatives Specified for the Large Solid Fuel Subcategory

Appendix B to Subpart DDDDD--Applicability of General Provisions to Subpart DDDDD

APPENDIX ZZZZ

NESHAPS REQUIREMENTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES

The diesel emergency generator (EU 009) is subject to the applicable requirements of this 40 CFR 63, Subpart ZZZZ. The provisions of this Subpart may be provided in full upon request.

Source: Federal Register dated 6/15/04; Effective Date 8/16/04

What This Subpart Covers

63.6580 The purpose of subpart ZZZZ

63.6585 Subject to this subpart

63.6590 Parts of my plant does this subpart cover

63.6595 Compliance with this subpart

Emission Limitations

63.6600 Emission limitations and operating limitations

General Compliance Requirements

63.6605 General requirements for complying with this subpart

Testing and Initial Compliance Requirements

63.6610 Dates to conduct the initial performance tests or other initial compliance demonstrations

63.6615 Subsequent performance tests

63.6620 Performance tests and other procedures

63.6625 Monitoring, installation, operation, and maintenance requirements

63.6630 Initial compliance with the emission limitations and operating limitations

Continuous Compliance Requirements

63.6635 Monitoring and collecting data to demonstrate continuous compliance

63.6640 Continuous compliance with the emission limitations and operating limitations

Notification, Reports, and Records

63.6645 Notifications

63.6650 Reports

63.6655 Records

63.6660 Records form and retention

Other Requirements and Information

63.6665 General Provisions

63.6670 implementation and enforcement

63.6675 Definitions

Tables to Subpart ZZZZ of Part 63

Table 1a to Subpart ZZZZ of Part 63--Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE

Table 1b to Subpart ZZZZ of Part 63--Operating Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE

Table 2a to Subpart ZZZZ of Part 63--Emission Limitations for New and Reconstructed Lean Burn and Compression Ignition Stationary RICE

APPENDIX ZZZZ

Table 2b to Subpart ZZZZ of Part 63--Operating Limitations for New and Reconstructed Lean Burn and Compression Ignition Stationary RICE

Table 3 to Subpart ZZZZ of Part 63--Subsequent Performance Tests

Table 4 to Subpart ZZZZ of Part 63--Requirements for Performance Tests

Table 5 to Subpart ZZZZ of Part 63--Initial Compliance with Emission Limitations and Operating Limitations

Table 6 to Subpart ZZZZ of Part 63--Continuous Compliance with Emission Limitations and Operating Limitations

Table 7 to Subpart ZZZZ of Part 63--Requirements for Reports

Table 8 to Subpart ZZZZ of Part 63--Applicability of General Provisions to Subpart ZZZZ- See Appendix A to Subpart ZZZZ

Appendix A to Subpart ZZZZ of Part 63- Applicability of General Provisions to Subpart ZZZZ

Appendix CP-1, Compliance Plan for Alternate Methods of Operation

Florida Power & Light Company

Permit No. 0850001-017-AV

Martin Plant

E.U. ID No.	Brief Description
-011	Combined Cycle Combustion Turbine (8A)
-012	Combined Cycle Combustion Turbine (8B)
-017	Combined Cycle Combustion Turbine (8C)
-018	Combined Cycle Combustion Turbine (8D)

These emissions units have not to date been operated in the high power modes (HPMs) of peaking or power augmentation. Therefore, this compliance plan is included to cover initial testing requirements for these HPMs for emissions of CO and NO_x. Please see Specific Conditions **H.9, H.18 and H.19.**

CP.1. Test Notification. The permittee shall notify the Department in writing at least 30 days prior to any initial NSPS performance tests and at least 15 days prior to any other required tests.

[Rule 62-297.310(7)(a)9., F.A.C. and 40 CFR 60.7, 60.8; and 0850001-008-AC, Specific Condition 17. (Facility Information)]

CP.2. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 1. The type, location, and designation of the emissions unit tested.
 2. The facility at which the emissions unit is located.
 3. The owner or operator of the emissions unit.
 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 8. The date, starting time and duration of each sampling run.
 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 10. The number of points sampled and configuration and location of the sampling plane.

Appendix CP-1, Compliance Plan for Alternate Methods of Operation

Florida Power & Light Company

Permit No. 0850001-017-AV

Martin Plant

11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

Appendix H-1. Permit History

Florida Power & Light Company

Permit No. 0850001-017-AV

Martin Plant

Permit History (for tracking purposes):

E.U. ID No	Description	Permit No.	Issue Date	Expiration Date	Revised Date(s)
-001	Fossil Fuel Fired Steam Generator Unit 1	AC-73044 AC43-4037 AO43-170568	3/20/73 6/30/77 2/23/90	11/29/94	2/16/93
-002	Fossil Fuel Fired Steam Generator Unit 2	AC-73045 AC43-4038 AO43-170567	3/20/73 6/30/77 2/20/90	11/29/94	2/16/93
-003 -004 -005 -006 -007 -009	PSD Construction Permit for Combined Cycle Combustion Turbines Units 3A, 3B, 4A 4B and associated support equipment Auxiliary Boiler Diesel Generator Permit modifications (PSD-FL-146A) to include DARM guidance, flexibility in VOC testing and revision of a CEM issue. Power Plant Siting Project No.	PSD-FL-146 0850001-001-AC 0850001-002-AC 0850001-003-AC (PSD-FL-146A) PA89-27	6/05/91 Withdrawn 9/06/96 9/06/96 2/20/91		7/19/93 9/16/94 9/06/96 10/14/97 7/20/99 9/28/94
001 thru -009	Initial Title V Permit	0850001-004-AV (Initial Title V Permit)	1/01/99	12/31/03	
003-006	PSD-FL-146B Permit Modification: Construction/Installation of Inlet Foggers	0850001-005-AC PSD-FL-146B	7/20/99		
	Appendix I-1 List of Insignificant Units	0850001-006-AV (Administrative Permit Correction)	7/26/00	12/31/03	
003-006	Inclusion of the Inlet Foggers project in Title V. Combined Cycle Combustion Turbines Units 3A, 3B, 4A and 4B.	0850001-007-AV (Title V Revision)	7/26/00	12/31/03	
-011 -012 -013	PSD Construction Permit for Simple Cycle Combustion Turbines Units 8A and 8B, two Natural Gas Heaters and support equipment.	0850001-008-AC PSD-FL-286	8/16/00	12/01/03	
-011 & 012	Modification request. Simple-Cycle Combustion Turbines Units 8A and 8 B.	0850001-009-AV	Withdrawn		
011 & 012 013 & 014 017 & 018	PSD Construction for Combined Cycle Turbine System ("4-on-1"). Units 8A thru 8D and associated equipment.	0850001-010-AC (PSD-FL-327)	4/16/03	12/30/06	
-011 & 012	Permit modification. Simple-Cycle Combustion Turbines Units 8A and 8 B.	0850001-011-AC PSD-FL-286A	3/20/03	12/01/03	
-011 -012 -013	Incorporation in the Title V permit: Simple-Cycle Combustion Turbines Units 8A and 8B, two Natural Gas Heaters and support equipment..	0850001-012-AV (Title V Permit Revision)	6/20/03	12/31/03	
001 thru -013 015 & 016	Facility wide. Permit renewal.	0850001-013-AV (Title V Permit Renewal)	12/18/03	12/31/08	

E.U. ID No	Description	Permit No.	Issue Date	Expiration Date	Revised Date(s)
003-006	Combined Cycle Combustion Turbines Units 3A, 3B, 4A and 4B. Request to modify annual performance tests.	0850001-014-AV	Withdrawn		
011 & 012 017 & 018	Startup and Excess Emissions revisions Unit 8 Combined Cycle Turbine System ("4-on-1")	0850001-015-AC PSD-FL-327A Permit Modification	7/5/2005	7/5/2010	
003-006	To revise test performance conditions of Combined Cycle Units 3A, 3B, 4A and 4B. To revise excess emissions period for Unit 8.	0850001-016-AC PSD-FL-146C and PSD-FL-327B Permit Modification	1/17/2006		
011 & 012 013 & 014 017 & 018 & 019	Incorporation of Unit 8 Combined Cycle Turbine System ("4-on-1") and associated equipment. Inclusion of AC Permits Mod. 0850001-015-AC (PSD-FL-327A) and 0850001-016-AC (PSD-FL-327B).	0850001-017-AV (Title V Permit Revision of 0850001-013-AV)	03/15/07 Effective Date	12/31/2008	

ID Number Changes (for tracking purposes): From: Facility ID No. 50WPB430001; To: Facility ID No. 0850001

APPENDIX 3 – Permit FL0030988-007 IW1S



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

NOTICE OF PERMIT

DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JUN 19 2008

SITING COORDINATION

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

In the Matter of an
Application for Permit by:

Mr. William Reichel
Plant General Manager
Florida Power & Light Company
P.O. Box 14000
Juno Beach, Florida 33408

DEP File No. FL0030988-007-IW1S
Martin County
Martin Power Plant

Enclosed is Permit FL0030988, issued under Section 403.0885, Florida Statutes, and DEP Chapter 62-620, Florida Administrative Code, authorizing wastewater discharge from the FPL-Martin, Martin County to the St. Lucie Canal, a Class III Fresh water.

Any party to this order (permit) has the right to seek judicial review of the permit under Section 120.68, Florida Statutes, by the filing of a Notice of Appeal under Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000 and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this notice is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Janet G. Llewellyn
Director
Division of Water Resource Management
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(850) 245-8336

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 06-18-08 to the listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52(9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

S. Shields 06-18-08
(Clerk) (Date)

Copies furnished by certified mail to:

Chief, NPDES Permitting Section, EPA Region 4, Atlanta, GA
Chairman, Board of Martin County Commissioners
Andy Flajole, Florida Power & Light

Copies furnished by interoffice mail to:

Tim Powell, P.E., DEP Southeast District
Justin Wolfe, DEP OGC (w/o enclosures)
Mike Halpin, DEP Tallahassee

**STATE OF FLORIDA
INDUSTRIAL WASTEWATER FACILITY PERMIT**

PERMITTEE:

Florida Power & Light Company
Martin Plant
P.O. Box 176
Indiantown, FL 34956

PERMIT NUMBER:

FL0030988 (Major)

PA FILE NUMBER:

FL0030988-007-IW1S

ISSUANCE DATE:

June 11, 2008

EXPIRATION DATE:

June 10, 2013

RESPONSIBLE AUTHORITY:

William Reichel
Plant General Manager

FACILITY:

FPL-Martin Plant
21900 S.W. Warfield Boulevard
Indiantown, FL 34956
Martin County

Latitude: 27° 03' 38" N Longitude: 80° 33' 46" W

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and applicable rules of the Florida Administrative Code (F.A.C.), and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System (NPDES). This permit is accompanied by an Administrative Order pursuant to paragraphs 403.088(2) (e) and (f), F.S. Compliance with Administrative Order AO015TL is a specific requirement of this permit. The above named permittee is hereby authorized to operate the facilities shown on the application and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

The facility is an electric generating plant with a total generating capacity of approximately 4,300 megawatts (MW). The existing facility consists of two 863 MW residual fuel oil and natural gas fired conventional steam electric generating units (Units 1 and 2), two nominal 500 MW distillate fuel oil and natural gas fired combined cycle units (Units 3 and 4), and one nominal 1,150 MW distillate fuel oil and natural gas fired combined cycle unit (Unit 8), which is equipped with a selective catalytic reduction system for nitrogen oxides control. Unit 8 has a recirculating mechanical draft cooling tower with make-up supplied from the existing cooling pond and cooling tower blowdown discharged to the cooling pond. The Standard Industrial Classification (SIC) code for this electric power plant is 4911.

This permit includes conditions for internal outfalls I-011, I-012, and I-013 (which have not yet been constructed) for future facilities that have been given preliminary approval under the Florida Electrical Power Plant Siting Act (PPSA), namely two gas-fired combined cycle units (Units 5 and 6) and a coal gasification facility. These facilities will require final approval in subsequent proceedings under the PPSA prior to construction and operation.

WASTEWATER TREATMENT: Wastewater is discharged into a 6800-acre cooling pond whose water level is regulated by South Florida Water Management District. The cooling pond receives treated effluent from the on-site Industrial Wastewater Treatment Plant, treated effluent from two on-site Sanitary Wastewater Treatment Plants, cooling pond seepage, treated low-volume wastewater (reject water from the Reverse Osmosis Unit, treated boiler

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blowdown & lab wastes), treated water from on-site oil/water separators, groundwater from the Floridan aquifer (make-up) and recirculated non-contact condenser cooling water and cooling tower blowdown from Unit 8.

Wastewater from continuous production-related processes, water treatment system and from periodic maintenance related activities for Units 1 and 2 is treated in the Industrial Wastewater Treatment Plant, which includes two solid settling basins, two neutralization basins, two precipitation basins, one storm water basin, one sludge drying basin, one oil/water separator, and a recovered service water basin. All of the basins are lined with either synthetic material or cement, except for the sludge drying basin which is unlined. Brine from the plant service water system is also discharged to the cooling pond. Main condenser and auxiliary cooling water is withdrawn from and returned to the cooling pond. A separate oil/water separator serves the fuel oil tank storage area and also discharges to the cooling pond. The cooling pond discharges to the St. Lucie Canal when necessary after excessive rains (10 year/24 hour storm event) to maintain the permitted cooling pond level, and also up to twice per year during scheduled spillway gate tests. Cooling pond seepage at various points around the berm also discharge to the L-65 and St. Lucie Canals.

Wastewater from Units 3, 4 and 8 and water treatment systems and process wastes from the combined cycle units are treated in chemical waste treatment facilities which include equalization, neutralization, coagulation, precipitation, sedimentation, dewatering, filtration and/or final neutralization. Some metal cleaning wastes may be burned in the Unit 1 and 2 boilers or treated and disposed of off site. Non-hazardous sludges generated are treated by thickening and pressure filtration with liquid effluents being returned to the treatment system and solids stockpiled in an area designated south of the wastewater treatment area or disposed of offsite at a landfill.

The Industrial Wastewater Treatment (IWT) system treats the process and service wastewater, stormwater runoff and washdown from the materials storage areas. The IWT includes the following basins and units: oil/water separation; neutralization tank; diversion boxes; coal, IWT sludge, and slag runoff retention basins; oxidation tank; clarification; chemical restabilization tank (neutralization); filtration; and sludge handling system. All oil-bearing equipment is segregated using curbed areas with drains directing washdown, runoff, minor leaks, and spills to the oil/water separator. Low volume wastes (boiler blowdown, laboratory wastes, and RO concentrate) will be combined in a neutralization tank for pH adjustment. Filter backwash water from the makeup water treatment is directed to the equalization basin, and subsequently filtered.

The metal cleaning wastes associated with the combustion turbine and compressor washing is routed to a 20,000 gallon tank for subsequent filtration treatment. Spent chemicals and metal cleaning wastes not associated with the wash operations will be disposed off site by a licensed contractor.

Domestic wastewater is treated in two separate extended aeration package sewage treatment plants. The Units 1 and 2 sewage treatment plant is permitted at 0.01 MGD and discharges directly to the cooling pond via Outfall I-06A. The Units 3 and 4 sewage treatment plant is permitted at 0.005 MGD and discharges to the Units 3 and 4 once through cooling system discharge pipe, Outfall I-06B.

Intake traveling screen wash water, used to clean debris from the traveling screens, is routed back to the respective intake areas after any debris is collected in a bin.

The accumulated rainfall/runoff from the fuel oil storage tank farm and pump area, located inside the earthen diked areas, is routed through an API separator, and the treated effluent, after inspection for a visible sheen, is pumped into the cooling pond.

Stormwater runoff from the coal pile, IWT sludge pile, coal transfer area washdown, and leachates will be directed to the coal pile area runoff treatment (Neutralization/oxidation after clarification, and sludge handling functions).

Stormwater runoff from a portion of Unit 8, non-equipment area will be routed to two of the existing stormwater ponds.

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EFFLUENT DISPOSAL:

Surface Water Discharge:

An infrequent discharge of overflow from the Cooling Pond through Outfall D-001 located approximately at Latitude: 27° 00' 15" N Longitude: 80° 35' 00" W to an intake/discharge canal then to the St. Lucie Canal, a Class III Fresh water.

An intermittent discharge of cooling pond seepage and surface runoff through Outfall D-002 located approximately at Latitude: 27° 00' 12" N Longitude: 80° 35' 03" W via points sources discharges thence to the Cooling Pond Intake/Discharge Canal thence to St. Lucie Canal, a Class III Fresh water.

An intermittent discharge of cooling pond seepage and surface runoff through Outfall D-003, located approximately at Latitude: 27° 02' 45" N Longitude: 80° 35' 15" W, to L-65 Canal via Barley Barber Swamp and the North Perimeter Ditch, a Class III Fresh water.

Site runoff during proposed construction and operation through Outfalls D-05A-E to the east perimeter ditch, and thence to the St. Lucie Canal, a Class III Fresh water.

Internal Outfalls:

The cooling pond discharge is comprised of discharges from the following internal discharges: non-contact condenser cooling water from Units 1, 2, 3, and 4, as well as discharges from internal outfalls as follows: low volume wastes and non-chemical metal cleaning wastes (Internal Outfall I-004); site runoff during construction and operation (Outfalls D-05A-E) to the east perimeter ditch, domestic wastewater treatment plant effluents (Internal Outfalls I-006 A & B); combined cycle wastewater treatment system effluent (Internal Outfall I-007) via Units 3 and 4 once-through cooling water; metal cleaning waste pretreatment facility (Units 3-6 and 8) effluent discharges through (Internal Outfall I-008 via Internal Outfall I-007); coal, limestone and sulfur handling runoff (Internal Outfall I-009); slag handling and storage area runoff (Internal Outfall I-010); slag test cell leachate (Internal Outfall I-011); slag test cell runoff (Internal Outfall I-012); and construction dewatering for coal gasification and peaking units (Internal Outfall I-013). Internal Outfalls I-011, I-012, and I-013 are associated with Units 5 and 6 which have not yet been constructed. These generating units and internal outfalls have been granted preliminary authorization under the PPSA.

IN ACCORDANCE WITH: The limitations, monitoring requirements and other conditions as set forth in Part I through Part VIII on pages 4 through 33 of this permit.

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I. Effluent Limitations and Monitoring Requirements

A. Surface Water Discharges

- During the period beginning on the issuance date of this permit and lasting through the expiration date, the permittee is authorized to discharge from **Outfall D-001-Cooling Pond Overflow** to the St. Lucie Canal, a Class III Fresh water. This outfall includes, or will include at a future date, discharges for Internal Outfalls I-004 through I-013 and non-contact cooling water from Units 1-6 and unit 8 cooling tower blowdown to the Plant Intake/ Discharge Canal then to the St. Lucie Canal.

Such discharges shall be limited and monitored by the permittee as specified below:

Parameters (units)	Discharge Limitations			Monitoring Requirements		
	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	--	Report	--	Daily, When Discharging	Calculated	EFF-1
Temperature, Water (DEG.F)	--	92.0 (See Condition I.A.14.)	--	2/Daily, When Discharging	Instantaneous	EFF-1
Temperature, Water, Ambient (DEG.F)	--	Report	--	2/Daily, When Discharging	Instantaneous	SWA-1
(ΔT)Temp. Diff. between Outfall and Ambient Monitoring Location (DEG.F)	--	5.0 (See Condition I.A.14.)	--	2/Daily, When Discharging	Calculated	EFF-1 SWA-1
Phosphate, Ortho (as PO ₄) (MG/L)	--	Report	--	Weekly	Grab	EFF-1
Phosphorus, Total (as P) (MG/L)	--	Report	--	Weekly	Grab	EFF-1
Nitrogen, Nitrate (as N) (MG/L)	--	Report	--	Weekly	Grab	EFF-1
Nitrogen, Nitrite (as N) (MG/L)	--	Report	--	Weekly	Grab	EFF-1
Nitrogen, Total (MG/L)	--	Report	--	Weekly	Grab	EFF-1
Nitrogen, Ammonia, Total (as N) (MG/L)	--	Report	--	Weekly	Grab	EFF-1
Ammonia, Unionized (as NH ₃) (MG/L)	--	Report (See Condition I.A.5.)	--	Weekly	Calculated	EFF-1
Temperature, Water (DEG. C)	--	Report (See Condition I.A.5.)	--	Weekly	Instantaneous	EFF-1
pH (SU)	--	Report (See Condition I.A.5.)	Report (See Condition I.A.5.)	Weekly	Grab	EFF-1
Oxygen, Dissolved (DO) (MG/L)	--	--	Report	Weekly	Grab	EFF-1
Oil and Grease (MG/L)	--	Report	--	Weekly	Grab	EFF-1

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Parameters (units)	Discharge Limitations			Monitoring Requirements		
	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Solids, Total Dissolved (TDS) (MG/L)	--	Report	--	Weekly	Grab	EFF-1
Solids, Total Suspended (MG/L)	--	Report	--	Weekly	Grab	EFF-1
Sulfate, Total (MG/L)	--	Report	--	Weekly	Grab	EFF-1
Chloride (as Cl) (MG/L)	--	Report	--	Weekly	Grab	EFF-1
Chlorine, Total Residual (TRC) (MG/L)	--	Report (See Condition I.A.15.)	--	Daily, When Discharging	Grab	EFF-1
Turbidity (NTU)	--	Report	--	Weekly	Grab	EFF-1
Arsenic, Total Recoverable (UG/L)	Report	Report	--	Weekly	Grab	EFF-1
Cadmium, Total Recoverable (UG/L)	Report	Report (See Condition I.A.3.)	--	Weekly	Grab	EFF-1
Chromium, Total Recoverable (UG/L)	Report	Report (See Condition I.A.3.)	--	Weekly	Grab	EFF-1
Copper, Total Recoverable (UG/L)	Report	Report (See Condition I.A.3.)	--	Weekly	Grab	EFF-1
Iron, Total Recoverable (MG/L)	Report	Report	--	Weekly	Grab	EFF-1
Lead, Total Recoverable (UG/L)	Report	Report (See Condition I.A.3.)	--	Weekly	Grab	EFF-1
Mercury, Total Recoverable (UG/L)	Report	Report	--	Weekly	Grab	EFF-1
Selenium, Total Recoverable (UG/L)	Report	Report	--	Weekly	Grab	EFF-1
Sodium, Total Recoverable (MG/L)	--	Report	--	Weekly	Grab	EFF-1
Zinc, Total Recoverable (UG/L)	Report	Report (See Condition I.A.3.)	--	Weekly	Grab	EFF-1
Hardness, Total (as CaCO ₃) (MG/L)	--	Report	--	Weekly	Grab	EFF-1
Specific Conductance (UMHO/CM)	--	Report	--	Weekly	Grab	EFF-1

2. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition 1.A.1 and as described below:

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Sample Point	Description of Monitoring Location
EFF-1	Nearest within the cooling pond near spillway gate accessible after final treatment, but prior to mixing with receiving water.
SWA-1	Two feet below water surface in mid-channel of the St. Lucie Canal and approximately 500 feet upstream of the intersection of the St. Lucie Canal and the discharge canal.

3. This condition applies to calculation of limits for total recoverable cadmium (Cd), chromium (Cr) copper (Cu), lead (Pb), and zinc monitored at D-001 calculated using the following equations:

$$\text{Cd} \leq e^{(0.7409[\ln H]-4.719)}$$

$$\text{Cr} \leq e^{(0.819[\ln H]+0.6848)}$$

$$\text{Cu} \leq e^{(0.8545[\ln H]-1.702)}$$

$$\text{Pb} \leq e^{(1.273[\ln H]-4.705)}$$

$$\text{Zn} \leq e^{(0.8473[\ln H]+0.884)}$$

Total hardness shall be measured at the time of the effluent sample. The "ln H" means the natural logarithm of total hardness expressed as milligrams/Liter (mg/L) of CaCO₃. This equation can only be applied for hardness in the range of 25 mg/L to 400 mg/L as CaCO₃. If the total hardness is below 25 mg/L, the permittee shall use 25 mg/L for total hardness in the equation and if the hardness is above 400 mg/L, the permittee shall use 400 mg/L for total hardness in the equation.

4. The maximum cooling pond water surface elevation authorized by the South Florida Water Management District shall be used as an indicator for discharge.
5. Effluent samples for pH and temperature (grab) shall be taken simultaneously with each total ammonia grab sample. Un-ionized ammonia shall be calculated in accordance with the procedure provided by the Department (refer to the website www.dep.state.fl.us/labs/library/index.htm). All measured values for pH, temperature, and total ammonia used to calculate an un-ionized ammonia value shall be reported as an attachment to the Discharge Monitoring Report (DMR). All calculated un-ionized ammonia values shall be reported on the attachment. The daily maximum value for un-ionized ammonia for each reporting period shall be reported on the DMR.
6. The permittee shall notify the Southeast District Branch Office two weeks prior to a scheduled gate test.
7. This discharge is permitted only in cases caused by extreme or cumulative rainfall in excess of a 10 year, 24-hour rainfall, where unavoidable to prevent loss of life, severe property damage, or damage to the physical integrity of the cooling pond or its structures and up to twice each year to test emergency release gates.
8. In the event an unscheduled discharge occurs the permittee shall inform the Florida Department of Environmental Protection Southeast District Branch Office by telephone as soon as practicable, but in no case later than 48 hrs after the discharge occurs. The permittee shall also provide the Department with the following information, in writing within ten (10) days of the discharge: 1) a description and cause of the discharge; 2) the period of discharge, including exact dates and times; and 3) the anticipated time the discharge is expected to continue.
9. The permittee shall take all reasonable steps to minimize any adverse impact to navigable waters resulting from the discharge, including such monitoring as necessary to determine the environmental impact of the discharge.

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10. Monitoring is required only when there is a discharge from Outfall D-001, except that internal monitoring is required whether or not a discharge occurs.
11. There shall be no discharge of floating debris, scum, oil or other matter in such amounts as to form nuisances or produce color, odor, taste, turbidity or other conditions to such degree as to create a nuisance or otherwise interfere with the beneficial use of the receiving waters in accordance with Rules 62-302.500(1)(a) and 62-302.530(500)(b), F.A.C. Any such discharges to waters of the State shall be reported to the Department when submitting DMRs.
12. The facility will sample at least once a year or prior to, but not more than two weeks before, releasing cooling pond water during a spillway gate test. This data shall be provided to the Southeast District Branch Office upon request for review and will be reported on a DMR to be submitted in January following the discharge(s). The cooling pond shall be sampled near the spillway at mid-depth for all parameters listed in Part I.A.1 above. If any of the above parameters, excluding pH and temperature reach 90% of the Class III fresh water criteria contained in Chapter 62-302, F.A.C., the permittee shall operate the cooling pond intake pumps in such a manner to maximize recycling of the discharged water back to the cooling pond.
13. If any of the above parameters, excluding pH and temperature, reach 80% of the Class III fresh water criteria contained in Chapter 62-302, F.A.C., the permittee shall notify the Department within 60 days of the sampling event and submit a letter within 120 days documenting the facility's ability to comply with water quality standards.
14. Heated water discharged at D-001 shall not be more than 5°F higher than the ambient (natural) temperature measured at SWA-1 in the St. Lucie canal and shall not exceed 92°F. At all times under all conditions of stream flow the discharge temperature shall be controlled so that at least two-thirds of the width of the discharge canal's surface remains at ambient (natural) temperature. Further, no more than one-fourth of the cross section of the discharge canal at a traverse perpendicular to the flow shall be heated by the discharge. [62-302.520]
15. Monitoring requirements for TRC are not applicable if chlorine has not been added to the non-contact cooling water systems of any electric generating unit or to the non-contact cooling water of any coal gasification facility during the previous 7 days.
16. During the period beginning on the issuance date of this permit and lasting through the expiration date, the permittee is authorized to discharge from **Outfalls D-002 and D-003 – Point Sources of Cooling Pond Seepage and Surface Runoff** associated with industrial activity to the East Perimeter Ditch to the Plant Intake/Discharge Canal to St. Lucie Canal and to L-65 Canal respectively.

Such discharges shall be limited and monitored by the permittee as specified below:

Parameters (units)	Discharge Limitations			Monitoring Requirements		
	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	Report (See Condition I.A.22.)	Report (See Condition I.A.22.)	--	Weekly	Totalizer	EFF-3, 4 & 5
				Annually	Totalizer	EFF-6 & 7
Temperature, Water (DEG.F)	--	92.0	--	2/Month	Grab	EFF-3, 4 & 5
				Monthly	Grab	EFF-6 & 7
Specific Conductance (UMHO/CM)	--	1275	--	Monthly	Grab	EFF-3, 4 & 5
				Annually	Grab	EFF-6 & 7
Oxygen, Dissolved (DO) (MGL)	--	--	5.0	Monthly	Grab	EFF-3, 4 & 5

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	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Oxygen, Dissolved (DO) (MG/L)	--	--	5.0	Annually	Grab	EFF-6 & 7
pH (SU)	--	8.5	6.0	Monthly	Grab	EFF-3, 4, 5, 6 & 7
Phosphorus, Total (as P) (MG/L)	--	Report	--	Monthly	Grab	EFF-3, 4 & 5
				Annually	Grab	EFF-6 & 7
Phosphate, Ortho (as PO4) (MG/L)	--	Report	--	Monthly	Grab	EFF-3, 4 & 5
				Annually	Grab	EFF-6 & 7
Oil and Grease (MG/L)	--	5.0	--	Monthly	Grab	EFF-3, 4 & 5
				Quarterly	Grab	EFF-6 & 7
Nitrogen, Ammonia, Total (as N) (MG/L)	--	Report	--	Monthly	Grab	EFF-3, 4 & 5
				Quarterly	Grab	EFF-6 & 7
Ammonia, Unionized (as NH3) (MG/L)	--	0.02 (See Condition I.A.26.)	--	Monthly	Grab	EFF-3, 4, 5, 6 & 7
Nitrogen, Nitrate (as N) (MG/L)	--	Report	--	Monthly	Grab	EFF-3, 4 & 5
				Annually	Grab	EFF-6 & 7
Nitrogen, Nitrite (as N) (MG/L)	--	Report	--	Monthly	Grab	EFF-3, 4 & 5
				Annually	Grab	EFF-6 & 7
Arsenic, Total Recoverable (UG/L)	50	--	--	Monthly	Grab	EFF-3, 4 & 5
				Semiannually	Grab	EFF-6 & 7
Iron, Total Recoverable (MG/L)	--	1.0	--	Monthly	Grab	EFF-3, 4 & 5
		1.0 ¹		Monthly	Grab	EFF-6
		1.0		Quarterly	Grab	EFF-7
Selenium, Total Recoverable (UG/L)	--	5.0	--	Monthly	Grab	EFF-3, 4 & 5
				Quarterly	Grab	EFF-6 & 7
Zinc, Total Recoverable (UG/L)	--	See Condition I.A.18.	--	Monthly	Grab	EFF-3, 4 & 5
				Annually	Grab	EFF-6 & 7
Mercury, Total Recoverable (UG/L)	--	0.012	--	Monthly	Grab	EFF-3, 4 & 5
				Annually	Grab	EFF-6 & 7
Copper, Total Recoverable (UG/L)	--	See Condition I.A.18.	--	Monthly	Grab	EFF-3, 4 & 5
				Semiannually	Grab	EFF-6 & 7
Chromium, Total Recoverable (UG/L)	--	See Condition I.A.18.	--	Monthly	Grab	EFF-3, 4 & 5
				Semiannually	Grab	EFF-6 & 7
Cadmium, Total Recoverable (UG/L)	--	See Condition I.A.18.	--	Monthly	Grab	EFF-3, 4 & 5
				Semiannually	Grab	EFF-6 & 7
Hardness, Total (as CaCO 3) (MG/L)	--	Report	--	Monthly	Grab	EFF-3, 4 & 5
				Semiannually	Semiannually	EFF-6 & 7
Chloride (as Cl) (MG/L)	--	Report	--	Monthly	Grab	EFF-3, 4 & 5
				Annually	Grab	EFF-6 & 7
Sodium, Total Recoverable (MG/L)	--	Report	--	Monthly	Grab	EFF-3, 4 & 5
				Annually	Grab	EFF-6 & 7
Sulfate, Total (MG/L)	--	Report	--	Monthly	Grab	EFF-3, 4 & 5

¹ Administrative Order A0-015-TL establishes an interim limitation of 4.8 mg/L, pursuant to the condition of the order.

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	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Sulfate, Total (MG/L)	--	Report	--	Annually	Grab	EFF-6 & 7
Solids, Total Dissolved (TDS) (MG/L)	--	Report	--	Monthly	Grab	EFF-3, 4 & 5
				Annually	Grab	EFF-6 & 7
Solids, Total Suspended (MG/L)	--	Report	--	Monthly	Grab	EFF-3, 4 & 5
				Semiannually	Grab	EFF-6 & 7
Turbidity (NTU)	--	Report	--	Monthly	Grab	EFF-3, 4 & 5
				Annually	Grab	EFF-6 & 7

17. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition 16 and as described below:

Sample Point	Description of Monitoring Location
EFF-3	At Outfall from Weir "a" (D-02B) to St. Lucie Canal and to L-65 Canal
EFF-4	At Outfall from Weir "b" (D-02C) to St. Lucie Canal and to L-65 Canal
EFF-5	At Outfall from Weir "c" (D-02D) to St. Lucie Canal and to L-65 Canal
EFF-6	At Outfall from Sumps 15-20 (D-03D), Sump 18 (for iron sampling, sump 17 if discharging) to Barley Barber Swamp
EFF-7	At Outfall from Sumps 24-26 (D-03E), Sump 25 to St. Lucie Canal and to L-65 Canal

18. This condition applies to calculation of limits for total recoverable cadmium, chromium, copper and zinc monitored at D-002 and D-003. The limits for total recoverable cadmium (Cd), chromium (Cr), copper (Cu) and zinc (Zn) shall be calculated using the following equations:

$$\text{Cd} \leq e^{(0.7409[\ln H]-4.719)}$$

$$\text{Cr} \leq e^{(0.819[\ln H]+0.6848)}$$

$$\text{Cu} \leq e^{(0.8545[\ln H]-1.702)}$$

$$\text{Zn} \leq e^{(0.8473[\ln H]+0.884)}$$

Total hardness shall be measured at the time of the effluent sample. The "ln H" means the natural logarithm of total hardness expressed as milligrams/Liter (mg/L) of CaCO₃. This equation can only be applied for hardness in the range of 25 mg/L to 400 mg/L as CaCO₃. If the total hardness is below 25 mg/L, the permittee shall use 25 mg/L for total hardness in the equation and if the hardness is above 400 mg/L, the permittee shall use 400 mg/L for total hardness in the equation.

19. For Outfall D-002, flow shall be the cumulative flows from weirs at Outfalls D-02B, D-02C and D-02D; and pH shall be a summary of individual values from Outfalls D-02B, D-02C and D-02D.
20. Monitoring at Outfalls D-03D and D-03E will consist of representative wastewater as described in conditions I.A.21 through I.A.25.

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21. For Outfalls D-03D and D-03E, all parameters with the exception of flow and iron shall be monitored only at sumps 18 and 25, respectively.
22. For Outfalls D-03D, flow shall be a weekly totalized value from sumps 15 through 20. For Outfall D-03E, flow shall be a weekly totalized value from sumps 24 through 26. Flow data from each sump shall be maintained in a form so that cumulative flow to D-03D and D-03E can be reported individually on a monthly, quarterly, and annual basis.
23. For Outfalls D-03D and D-03E, iron shall be monitored at sumps 17 and 25 (when discharging), respectively. If sump 17 is not discharging, sumps 18 and 25 shall be monitored.
24. For Outfalls D-03D and D-03E, temperature and pH shall be a summary of individual values from sumps 18 and 25 when discharging to the Northwest Mitigation Area.
25. If total suspended solids exceed 50 mg/L, the permittee shall document the source of the exceedance at Outfalls D-02B, D-02C, D-02D, D-03D and D-03E.
26. Effluent samples for pH and temperature (grab) shall be taken simultaneously with each total ammonia grab sample. Unionized ammonia (reported as N) shall be calculated in accordance with the SOP provided by the Department (refer to the website www.dep.state.fl.us/labs/library/index.htm). All measured values for pH, temperature, and total ammonia used to calculate an unionized ammonia value shall be reported as an attachment to the Discharge Monitoring Report (DMR). All calculated un-ionized ammonia values shall be reported on the attachment. The daily maximum value for un-ionized ammonia for each reporting period shall be reported on the DMR.
27. During the period beginning on the issuance date of this permit and lasting through the expiration date, the permittee is authorized to discharge from Internal **Outfall I-004 –Units 1 and 2 Wastewater Treatment System Effluent** (includes low volume wastes[includes the new make up water system] and non-chemical metal cleaning waste) to Cooling Pond.

Such discharges shall be limited and monitored by the permittee as specified below:

Parameters (units)	Discharge Limitations			Monitoring Requirements		
	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	Report	Report	--	Monthly	Calculated	INT-8
pH (SU)	--	9.0	6.0	Monthly	Grab	INT-8
Solids, Total Suspended (MG/L)	30.0	100.0	--	Semiannually	Grab	INT-8
Oil and Grease (MG/L)	15.0	20.0	--	Monthly	Grab	INT-8

28. Discharge of hydrazine in boiler blowdown and in plant lay-up waters is authorized without limitations or monitoring requirements.
29. In order to provide continued assurance that the Plant Waste Treatment System (PWTS), in conjunction with further treatment in the cooling pond, is providing equivalent treatment for total iron, total copper, and other pollutants in Nonchemical Metal Cleaning Waste (NCMCW), the permittee shall annually evaluate the treatment provided by the PWTS during a typical NCMCW treatment period. Each analysis shall be representative of one or more of the various NCMCW components (i.e. economizer hopper wash, dust collector wash, boiler fireside wash, air preheater wash, or stack wash). Analyses shall include soluble and total copper, manganese, iron and zinc in the final effluent and the total quantity and average concentration of each of the above metals (both

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soluble and total). Sampling, analysis and evaluation at internal points in the treatment process may be included at the permittee's discretion. Results shall be submitted annually, no later than December 31st of each year. In the event that the Department finds that the data do not support continuation of the equivalency determination, the Department may require additional testing or appropriately modify the permit.

Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.A.27. and as described below.

Sample Point	Description of Monitoring Location
INT-8	Wastewater treatment system discharge prior to combination with any other waste stream or to the cooling pond.

30. During the period beginning on the issuance date of this permit and lasting through the expiration date, the permittee is authorized to discharge from **Outfall D-005 – Site Runoff** during construction and operation D-05A (runoff from Units 1 and 2); D-05E (Ponds D1, E, F and G); D-05B (Ponds 5B1 and 5B2); D-05C (Runoff from undeveloped areas) D-05D (Pond D2) to East Perimeter Ditch thence to the St. Lucie Canal.

31. Such discharges shall be limited and monitored by the permittee as specified below:

Parameters (units)	Discharge Limitations			Monitoring Requirements		
	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	--	Report	--	Weekly	Calculated	EFF-9,10,11,12
pH (SU)	--	8.5	6.0	Monthly	Grab	EFF-9,10,11,12
Turbidity (NTU)	--	Report	--	Semiannually	Grab	EFF-9,10,11,12
Solids, Total Suspended (MG/L)	--	50.0	--	Semiannually	Grab	EFF-9,10,11,12
Oil and Grease (MG/L)	No visible Sheen			Semiannually	Grab	EFF-9,10,11,12

32. Runoff discharged from Outfall D-05C which is uncontaminated by the construction activities not associated with industrial activity is permitted without monitoring requirements.

33. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.A.30. and as described below.

Sample Point	Description of Monitoring Location
EFF- 9, 10, 11, 12	Point of discharge from D-05A, D-05E, D-05B, and D-05D respectively prior to any mixing with any other waste stream to the East Perimeter Ditch then to St. Lucie Canal.

34. During the period beginning on the issuance date of this permit and lasting through the expiration date, the permittee is authorized to discharge from **INTERNAL OUTFALLS I-06A AND I-06B DOMESTIC WASTE TREATMENT PLANT EFFLUENTS** to the Cooling pond from Units 1 and 2 and from Units 3-6, respectively.

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Such discharges shall be limited and monitored by the permittee as specified below:

Parameters (units)	Discharge Limitations		Monitoring Requirements		
	Average	Single Sample	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	0.01 Annual Avg.	--	5 days/week	Flow meter	INT-13
	0.01 Annual Avg.	--	5 days/week	Flow meter	INT-14
BOD, Carbonaceous 5 day, 20C (MG/L)	20 Annual Avg.	60 Max.	Monthly	Grab	INT-13 & 14
	25 Monthly Avg.	--	Monthly	Grab	INT-13 & 14
	40 Weekly Avg.	--	Monthly	Grab	INT-13 & 14
Solids, Total Suspended (MG/L)	20 Annual Avg.	60 Max.	Monthly	Grab	INT-13 & 14
	30 Monthly Avg.	--	Monthly	Grab	INT-13 & 14
	45 Weekly Avg.	--	Monthly	Grab	INT-13 & 14
Coliform, Fecal (#/100ML)	See Condition I.A.37.		Monthly	Grab	INT-13 & 14
Chlorine, Total Residual (MG/L)	--	0.5 Min	5 Days/Week	Grab	INT-13 & 14
pH (SU)	6.0 to 9.0		5 Days/Week	Grab	INT-13 & 14

Additionally the influent to the sewage treatment plant shall be monitored as specified below:

Parameters (units)	Discharge Limitations		Monitoring Requirements		
	Annual Average	Monthly Average	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	0.005	--	5 Days/Week	Elapsed time meter or pumps	INF-1
BOD, Carbonaceous 5 day, 20C (MG/L)	--	Report	Monthly	Grab	INF-1 & 2
Solids, Total Suspended (MG/L)	--	Report	Monthly	Grab	INF-1 & 2
pH (SU)	6.0-9.0		5 Days/ Week	Grab	INF-1 & 2

35. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.A.34 and as described below:

Sample Point	Description of Monitoring Location
INF-1	Influent to sewage plant (For units 1 and 2). The influent pump station of the newly constructed treatment plant.
INF-2	Influent to sewage plant (For units 3 and 4). The influent pump station of the treatment plant.
INT-13	Effluent holding tank after filtration in the treatment plant (for units 1 and 2)
INT-14	Effluent pipe to the cooling pond exiting from the existing treatment plant (For units 3 and 4)

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36. A flow meter or elapsed time meters on pumps shall be used to measure flow and calibrated at least annually [62- 601.200(17) and .500(6), [for both influent and effluent]]
37. The arithmetic mean of the monthly fecal coliform values collected during an annual period shall not exceed 200 per 100 ml of effluent sample. The geometric mean of the fecal coliform values for a minimum of 10 samples of effluent, each collected on a separate day during a period of 30 consecutive days (monthly), shall not exceed 200 per 100 ml of sample. When 10 or more samples are taken, no more than 10 percent of the samples collected during a period of 30 consecutive days shall exceed 400 fecal coliform values per 100 ml of sample. Any one sample shall not exceed 800 fecal coliform values per 100 ml of sample. Note: To report the 90th percentile value, list the fecal coliform values obtained during the month in ascending order. Report the value of the sample that corresponds to the 90th percentile (multiply the number of samples by 0.9). For example, for 30 samples, report the corresponding fecal coliform number for the 27th value of ascending order. [62-600.440(4)(c)]
38. A minimum of 0.5 mg/L total residual chlorine must be maintained for a minimum contact time of 15 minutes based on peak hourly flow. [62-600.440(40)(b)]
39. Influent samples shall be collected so that they do not contain digester supernatant or return activated sludge, any other plant process recycled waters. [62-601.500(4)]
40. During the period of operation authorized by this permit, the domestic wastewater facilities shall be operated under the supervision of an operator(s) certified in accordance with Chapter 61E12-41, F.A.C. In accordance with Chapter 62-699, F.A.C., this facility is a Category III Class D facility and, at a minimum, operators with appropriate certification must be on site as follows:

A Class D or higher operator for 3 nonconsecutive visits/week for 1 1/2 hours/week. The lead operator must be a Class D operator, or higher for category III, 10,000 GPD [62-620.630(3), 12-24-96][62-699.310, 5-20-92][62-610.462]

A Class D or higher operator for 2 nonconsecutive visits/week for 1 hour/week. The lead operator must be a Class D operator, or higher for category III, 5,000 GPD [62-620.630(3), 12-24-96][62-699.310, 5-20-92][62-610.462]
41. A certified operator shall be on call during periods the plant is unattended. Daily checks of the plant shall be performed by the permittee or the permittee's representative or agent 5 days per week. On those days when the facility is not staffed by a certified operator, the permittee shall ensure that Flow, in conduit or through treatment plant, pH, and Total Chlorine Residual (For Disinfection) are monitored in accordance with Part I.A.5 of this permit. [62-699.311(1)]
42. The application to renew the domestic wastewater portion of this permit shall include an updated capacity analysis report prepared in accordance with Rule 62-600.405, F.A.C. [62-600.405(5)]
43. The application to renew the domestic wastewater portion of this permit shall include a detailed operation and maintenance performance report prepared in accordance with Rule 62-600.735, F.A.C. [62-600.735(1)]

Recordkeeping Requirements

44. The permittee shall maintain the following records on the site of the permitted facility and make them available for inspection:
 - a. Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least three years from the date the sample or measurement was taken;
 - b. Copies of all reports, other than those required in items a. and f. of this section, required by the permit for at least three years from the date the report was prepared, unless otherwise specified by Department rule;

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- c. Records of all data, including reports and documents used to complete the application for the permit for at least three years from the date the application was filed, unless otherwise specified by Department rule;
 - d. Monitoring information, including a copy of the laboratory certification showing the laboratory certification number, related to the residuals use and disposal activities for the time period set forth in Chapter 62-640, F.A.C., for at least three years from the date of sampling or measurement;
 - e. A copy of the current permit;
 - f. A copy of any required record drawings;
 - g. Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date of the logs or schedules. The logs shall, at a minimum, include identification of the plant; the signature and certification number of the operator(s) and the signature of the person(s) making any entries; date and time in and out; specific operation and maintenance activities; tests performed and samples taken; and major repairs made. The logs shall be maintained on-site in a location accessible to 24 -hour inspection, protected from weather damage, and current to the last operation and maintenance performed.
45. During the period beginning on the issuance date of this permit and lasting through the expiration date, the permittee is authorized to discharge from Internal **Outfall I-007-- Combined Cycle Wastewater Treatment System Effluent** (includes combined cycle process wastewater and equipment area stormwater from Units 3, 4 and 8) to Cooling Pond.

Such discharges shall be limited and monitored by the permittee as specified below:

Parameters (units)	Discharge Limitations			Monitoring Requirements		
	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	Report	Report	--	Monthly	Recorder	INT-15
Oil and Grease (MG/L)	15.0	20.0	--	Monthly	Grab	INT-15
Solids, Total Suspended (MG/L)	30.0	100.0	--	Semiannual	Grab	INT-15
pH	--	9.0	6.0	Monthly	Grab	INT-15

46. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.A.45 and as described below:

Sample Point	Description of Monitoring Location
INT-15	Wastewater treatment system effluent discharge prior to combination with any other waste stream discharge to the cooling pond.

47. During any period in which demineralizer regeneration waste is discharged from the neutralization tank directly to monitoring point I-007 without further treatment, samples for total suspended solids analysis shall be taken at the neutralization tank effluent and/or after combination with the wastewater treatment system effluent of not less than one representative grab sample during each day of such discharge to demonstrate compliance with limitations in Part I.A.45.
48. Discharge of hydrazine in Heat Recovery Steam Generator (HRSG) blowdown and in plant lay-up waters is authorized without limitations or monitoring requirements.

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49. There shall be no discharge of wastes from the coal gasification facilities via this outfall. During the period beginning on the issuance date of this permit and lasting through the expiration date, the permittee is authorized to discharge from Internal **OUTFALL I-008 – Metal Cleaning Waste Pretreatment Facility** (Units 3 through 6 and Unit 8) effluent to the Cooling Pond via Internal Outfall I-007.

Such discharges shall be limited and monitored by the permittee as specified below:

Parameters (units)	Discharge Limitations			Monitoring Requirements		
	Monthly Average	Monthly Total	Daily Maximum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	Report	Report	--	Continuous	Recorder	INT-16
Oil and Grease (MG/L)	15.0	--	20.0	Daily	Composite	INT-16
Solids, Total Suspended (MG/L)	30.0	--	100.0	Daily	Composite	INT-16
Copper, Total Recoverable (MG/L)	1.0	--	1.0	Daily	Composite	INT-16
Iron, Total Recoverable (MG/L)	1.0	--	1.0	Daily	Composite	INT-16
Batches	Report	--	Report	1/Batch	Logs	INT-16

50. Only metal cleaning wastes shall be discharged through this outfall.
51. Any metal cleaning wastes disposed of off site shall be disposed of in an environmentally acceptable manner and in compliance with all applicable Federal and State Regulations. Details of such disposal shall be provided to the Department not less than 30 days prior to any proposed metal cleaning waste disposal off site.
52. Notwithstanding the requirements in Part I.A.49 above, at such time as the permittee has demonstrated that certain chemical metal cleaning compounds from Units 1 and 2 can be burned in the operating boilers of Units 1 and/or 2 in a manner that will assure compliance with the limitations in Part I.A.49 above. The permittee may request that burning of the same wastes from Units 3-6 and Units 8 be allowed in the boilers of Unit 1 and/or 2. Such burning shall not be allowed except if specifically authorized by air permits.
53. Except for chemical cleaning operations in which CITRO-SOLV, EDTA or an equivalent cleaner is used and the Chemical Metal Cleaning Waste (CMCW) is burned in an operating unit, there shall be no discharge of CMCW to any waste stream which ultimately discharges to waters of the State. After the initial use of each cleaning product (including CITRO-SOLV), the permittee shall determine the flow of CMCW produced and monitor the effluent for a range of heavy metals, including total and dissolved iron, copper, nickel, and zinc, prior to and during discharge. Samples shall be taken after final treatment but prior to mixing with any other waste stream. This is to assure that metals are not being discharged in excess of the guideline limitations and the previous equivalency determination. This assessment shall occur once during the term of the permit. Results shall be submitted with the next DMR following the month in which the analysis was conducted.
54. There shall be no discharge of wastes from the coal gasification facilities via this outfall. Effluent samples shall be taken at the monitoring site locations listed in Part I.A.49. and as described below:

Sample Point	Description of Monitoring Location
INT-16	Metal Cleaning Waste Treatment Facility effluent prior to mixing with any other waste stream or discharge to the Cooling Pond. Batches shall be reported only if wastes are treated in discrete batches.

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55. During the period beginning on the issuance date of this permit and lasting through the expiration date, the permittee is authorized to discharge from Internal **Outfall I-009 – Coal, Limestone and Sulfur Handling Area Runoff** and **Outfall I-010 - Slag Handling Storage Area Runoff** (includes; **Outfall I-011 – Slag Test Cell Leachate**; and **Outfall I-012 – Slag Test Cell Runoff**) to the Cooling Pond.

Such discharges shall be limited and monitored by the permittee as specified below:

Parameters (units)	Discharge Limitations			Monitoring Requirements		
	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	--	Report	--	Weekly	Recorder	INT-17 & 18
Oil and Grease (MG/L)	--	Report	--	Monthly	Grab	INT-17 & 18
Solids, Total Suspended (MG/L)	--	50.0	--	Weekly	Grab	INT-17 & 18
pH (SU)	--	9.0	6.0	Weekly	Grab	INT-17 & 18

Effluent samples shall be taken at the monitoring site locations described below:

Sample Point	Description of Monitoring Location
INT-17 & 18	Point of discharge from each discharge/treatment system (Outfalls I-009 and I-010, respectively) prior to mixing with any other waste stream or discharge to the Cooling Pond

56. All batch discharges which bypass the treatment facility shall be monitored once per batch.
57. Not less than two years prior to the expected first receipt of coal on site or the last reapplication for this permit prior to expected first receipt of coal on site, whichever is earlier, the permittee shall submit a revised estimate of effluent characteristics for all rainfall related runoff and leachate sources included in Part I.A.55, based on most recent information relating to specific coal gasification technology and coal supply planned for use at this site. Expected changes to cooling pond and seepage water (D-001, D-002 and D-003) characteristics from those presently estimated shall also be provided. Additional or revised limitations and/or monitoring requirements may be imposed for each runoff related waste source, treatment facility discharges, and/or Outfalls D-001, D-002, and/or D-003, subsequent to this submittal.

Effluent samples shall be taken at the monitoring site locations listed and described in Permit Condition I.A.55.

58. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge from construction dewatering activities through Internal Outfall I-013 to Cooling Pond. Such discharge shall be limited and monitored by the permittee as specified below:

Parameters (units)	Discharge Limitations			Monitoring Requirements		
	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	--	Report	--	Weekly	Recorder	INT-19
Oil and Grease (MG/L)	--	Report	--	Monthly	Grab	INT-19
Solids, Total Suspended (MG/L)	--	50.0	--	Weekly	Grab	INT-19

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Parameters (units)	Discharge Limitations			Monitoring Requirements		
	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
pH (SU)	--	9.0	6.0	Weekly	Grab	INT-19

59. Effluent samples shall be taken at the monitoring site locations listed in Permit Condition I.A.58 and as described below:

Sample Point	Description of Monitoring Location
INT-19	Point of Discharge prior to mixing with any other waste.

60. There shall be no discharge of floating solids or visible foam in other than trace amounts.

61. The discharge shall not cause a visible sheen on the receiving water.

B. Underground Injection Control Systems

This section is not applicable to this facility.

C. Land Application Systems

This section is not applicable to this facility.

D. Other Methods of Disposal or Recycling

1. There shall be no discharge of industrial wastewater from this facility to ground or surface waters, except as authorized by this permit.

E. Other Limitations and Monitoring and Reporting Requirements

1. The sample collection, analytical test methods and method detection limits (MDLs) applicable to this permit shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs (method detection limits) and PQLs (practical quantification limits), which is titled "Florida Department of Environmental Protection Table as Required By Rule 62-4.246(4) Testing Methods for Discharges to Surface Water" is available at <http://www.dep.state.fl.us/labs/library/index.htm>. The MDLs and PQLs as described in this list shall constitute the minimum acceptable MDL/PQL values and the Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this permit. Any method included in the list may be used for reporting as long as it meets the following requirements:
 - a. The laboratory's reported MDL and PQL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;
 - b. The laboratory reported PQL for the specific parameter is less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the permit shall use methods that provide a PQL, which is equal to or less than the applicable water quality criteria stated in 62-302 FAC; and
 - c. If the PQLs for all methods available in the approved list are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest stated PQL shall be used.

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Where the analytical results are below method detection or practical quantification limits, the permittee shall report the actual laboratory MDL and/or PQL values for the analyses that were performed following the instructions on the applicable discharge monitoring report. Approval of alternate laboratory MDLs or PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. However, where necessary, the permittee may request approval for alternative methods or for alternative MDLs and PQLs for any approved analytical method, in accordance with the criteria of Rules 62-160.520 and 62-160.530, F.A.C.

2. Parameters which must be monitored as a result of a surface water discharge shall be analyzed using a sufficiently sensitive method in accordance with 40 CFR Part 136.
3. Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any. During the period of operation authorized by this permit, the permittee shall complete and submit to the Southeast District Office Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e., monthly, toxicity, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this permit. Monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below.

REPORT Type on DMR	Monitoring Period	DMR Due Date
Monthly or Toxicity	first day of month – last day of month	28 th day of following month
Quarterly	January 1 - March 31 April 1 – June 30 July 1 – September 30 October 1 – December 31	April 28 July 28 October 28 January 28
Semiannual	January 1 – June 30 July 1 – December 31	July 28 January 28
Annual	January 1 – December 31	January 28

DMRs shall be submitted for each required monitoring period including months of no discharge.

The permittee shall make copies of the attached DMR form(s) and shall submit the completed DMR form(s) to the Department at the address specified below:

Florida Department of Environmental Protection
Wastewater Compliance Evaluation Section, Mail Station 3551
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

4. Unless specified otherwise in this permit, all reports and notifications required by this permit, including twenty-four hour notifications, shall be submitted to or reported to the Southeast District Office at the address specified below:

Florida Department of Environmental Protection
Southeast District Branch Office
1801 SE Hillmoor Drive, Suite C-204
Port St. Lucie, Florida 34952
Phone Number-(772) 398-2806
FAX Number - (772) 398-2815 (All FAX copies shall be followed by original copies.)

5. All reports and other information shall be signed in accordance with requirements of Rule 62-620.305, F.A.C.

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6. The permittee shall provide safe access points for obtaining representative samples which are required by this permit.
7. If there is no discharge from the facility on a day scheduled for sampling, the sample shall be collected on the day of the next discharge.
8. Any bypass of the treatment facility which is not included in the monitoring specified in sections I.A, I.B, I.C, or I.D, is to be monitored for flow and all other required parameters. For parameters other than flow, at least one grab sample per day shall be monitored. Daily flow shall be monitored or estimated, as appropriate, to obtain reportable data. All monitoring results shall be reported on the appropriate DMR.
9. The permittee shall not store coal, soil, or other similar erodable materials in a manner in which runoff is uncontrolled, nor shall construction activities be conducted in a manner which produces uncontrolled runoff unless such uncontrolled runoff has been specifically approved by the Department. "Uncontrolled" shall mean without sedimentation basin or other controls approved by the Department.
10. The permittee is authorized to utilize sodium hypochlorite; inhibitors OP8413, Foamtrol AF 2290, Continum AEC 3108, Continum AEC 3145 and inhibitor AZ8104; biocides Biomate MBC2881, Biomate MBC781, and Biomate MBC881; antiscalants Hypersperse MDC150, Hypersperse MDC700, and Hypersperse MSI310; reverse osmosis cleaners citric acid, Kleen MCT104, Kleen MCT107, Kleen MCT403, Kleen MCT411, Kleen MCT442, Kleen MCT511, Kleen MCT882, and peracetic acid; and coagulants polyaluminum chloride, Solisep 134 and Solisep 135, inhibitor OP8413, Foamtrol AF 2290, Continum AEC 3108, Continum AEC 3145 and inhibitor AZ8104 and biocides Spectrus NX 1100 and Spectrus CT1300.
11. Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream, which ultimately may be released, to waters of the State is prohibited unless specifically authorized elsewhere in this permit. This requirement is not applicable to products used for lawn and agricultural purposes or to the use of herbicides if used in accordance with labeled instructions and any applicable State permit.

The permittee shall notify the Department in writing no later than six (6) months prior to instituting use of any biocide or chemical used in the cooling systems or any other portion of the treatment system which may be toxic to aquatic life. Such notification shall include:

- a. Name and general composition of biocide or chemical
- b. Frequencies of use
- c. Quantities to be used
- d. Proposed effluent concentrations
- e. Acute and/or chronic toxicity data (laboratory reports shall be prepared according to Section 12 of EPA document no. EPA/600/4-90/027 entitled, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, or most current addition.)
- f. Product data sheet
- g. Product label

The Department shall review the above information to determine if a major or minor permit revision is necessary. Discharge associated with the use of such biocide or chemical is not authorized without a permit revision by the Department.

12. There shall be no discharge of polychlorinated biphenyl compounds.

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II. Industrial Sludge Management Requirements

A. Industrial and Domestic Sludge Management Requirements

1. The method of management of sludges generated by the treatment of industrial wastewater at this facility is Class I solid waste landfill.
2. The permittee shall be responsible for proper treatment, management, use or land application of its industrial sludges.
3. Disposal of industrial sludge in a solid waste management facility permitted by the Department shall be in accordance with the requirements of Chapter 62-701, F.A.C. Storage, transportation, and disposal of sludge/solids characterized as hazardous waste shall be in compliance with requirements of Chapter 62-730, F.A.C.
4. The permittee shall keep records of the amount of industrial sludge disposed, transported, or incinerated. If a person other than the permittee is responsible for sludge transporting, disposal, or incineration, the permittee shall also keep the following records:
 - a. name, address and telephone number of any transporter, and any manifests or bill of lading used;
 - b. name and location of the site of disposal, treatment or incineration;
 - c. name, address, and telephone number of the entity responsible for the disposal, treatment, or incineration site.
5. Solids from the sludge drying basin shall be removed as necessary and stockpiled in the area designated south of the wastewater treatment system area. Prior to final disposal, the permittee shall obtain approval from the Department. The Department may also request analysis of the sludge prior to disposal.
6. Solids from the solids settling basins shall be removed as necessary to maintain optimum treatment, and may be used to construct the stabilized ash pad as previously approved by the Department, provided the permittee notifies the Department as least fourteen (14) days prior to such disposal. The Department may require analyses of the solids, in which case solids shall not be removed/disposed until the Department reviews the analyses reports and provides written authorization to the permittee. The asphalt top seal for the basins shall be inspected and maintained as necessary to prevent infiltration of stormwater or runoff. Any deviation from this usage or disposal (other than reuse, reclamation or disposal of solids in accordance with the requirements of Chapter 62-710, F.A.C.) must receive prior approval from the Department.
7. For Units 1 and 2 Wastewater Treatment System, Sludge Drying Basins, solids from the solids settling basins shall be removed as necessary to maintain optimum treatment and may be used to construct the stabilized ash pad as previously approved by the Department, provided the permittee notifies the Department at least fourteen (14) days prior to such disposal. The Department may require analyses of the solids, in which case solids shall not be removed/disposed until the Department reviews the analyses reports and provides written authorization to FPL. Any deviation from this usage or disposal must receive prior approval from the Department. The asphaltic top seal shall be inspected and maintained as necessary to prevent infiltration of stormwater or runoff.

B. Domestic Wastewater Residual Management Requirements:

1. The treatment, disposal, storage, and/or handling of residuals, septage, or other solids from the domestic wastewater treatment plant shall be in accordance with the following:
 - a. The method of residuals use or disposal by this facility is transport to the Indiantown Company WWTF (or other facility with prior approval from the Department) for further treatment and disposal, or disposal in a Class I or II solid waste landfill.

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- b. The permittee shall be responsible for proper treatment, management, use, and land application or disposal of its residuals.
- c. The permittee shall not be held responsible for treatment, management, use, or land application violations that occur after its residuals have been accepted by a permitted residuals management facility with which the source facility has an agreement in accordance with Rule 62-640.880(1)(c), F.A.C., for further treatment, management, use or land application.
- d. Disposal of residuals, septage, and other solids in a solid waste landfill, or disposal by placement on land for purposes other than soil conditioning or fertilization, such as at a monofill, surface impoundment, waste pile, or dedicated site, shall be in accordance with Chapter 62-701, F.A.C.
- e. Storage of residuals or other solids at the permitted facility shall require prior written notification to the Department.
- f. The permittee shall keep hauling records to track the transport of residuals between facilities. The hauling records shall contain the following information:
 - (1) Date and Time Shipped
 - (2) Amount of Residuals Shipped
 - (3) Degree of Treatment (if applicable)
 - (4) Name and ID Number of Residuals Management Facility or Treatment Facility
 - (5) Signature of Responsible party at Sarcc Facility
 - (6) Signature of hauler and Name of Hauling Firm.

These records shall be kept for five years and shall be made available for inspection upon request by the Department. A copy of the hauling records information maintained by the source facility shall be provided upon delivery of the residuals to the residuals management facility or treatment facility. The permittee shall report to the Department within 24 hours of discovery any discrepancy in the quantity of residuals leaving the source facility and arriving at the residuals management facility or treatment facility.

III. Ground Water Monitoring Requirements

1. The ground water related conditions for units 3 and 4 have been included in the site certification PA 89-27 condition (iii) (c).

The ground water conditions for Units 1 and 2 are given below.
2. During the period of operation authorized by this permit, the permittee shall sample ground water in accordance with this permit.
3. The following monitoring conditions are included in this permit.

A. Construction Requirements

This section is not applicable to this facility.

B. Operational Requirements

1. During the period of operation authorized by this permit, the permittee shall sample ground water in accordance with this permit and the approved ground water monitoring plan prepared under Rule 62-522.600, F.A.C.
2. The following monitoring wells shall be sampled for Units 1 and 2 Wastewater Treatment System, Sludge-Drying Basins:

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Depth (Feet)	Aquifer Monitored	New or Existing
MWI-01	100 feet west of the sludge drying basin.	20	Surficial	Existing
MWI-02	460 feet south of the sludge drying basin.	20	Surficial	Existing
MWI-03	50 feet southwest of the sludge drying basin.	15	Surficial	Existing

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Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Depth (Feet)	Aquifer Monitored	New or Existing
MWB-04	100 feet east of the Wastewater Treatment System site.	15	Surficial	Existing

MWB = Background; MWI = Intermediate

3. The monitor wells specified in Condition III.B.2 shall be sampled for the parameters listed below:

Parameter Name	Discharge Limit ¹	Units	Sample Type	Monitoring Frequency
Water Level Relative to NGVD	Report	FEET	Measured	Quarterly
Specific Conductance	Report	UMHO/CM	In-situ	Quarterly
pH	Report ²	SU	In-situ	Quarterly
Sodium, Total Recoverable	160	MG/L	Grab	Quarterly
Solids, Total Dissolved (TDS)	Report ²	MG/L	Grab	Quarterly
Sulfate, Total	Report ²	MG/L	Grab	Quarterly
Manganese, Total Recoverable	Report ²	MG/L	Grab	Quarterly
Iron, Total Recoverable	Report ²	MG/L	Grab	Quarterly
Fluoride, Total (as F)	Report ²	MG/L	Grab	Semiannually
Arsenic, Total Recoverable	0.01	MG/L	Grab	Semiannually
Copper, Total Recoverable	Report ²	MG/L	Grab	Semiannually
Lead, Total Recoverable	0.015	MG/L	Grab	Semiannually
Nickel, Total Recoverable	0.1	MG/L	Grab	Semiannually
Zinc, Total Recoverable	Report ²	MG/L	Grab	Semiannually
Chromium, Total Recoverable	0.1	MG/L	Grab	Semiannually

¹ Discharge limits to be applied at the boundary for the zone of discharge as specified in this section.

² As an existing installation under Chapter 62-522, F.A.C., and discharging to Class G-II ground water, this facility is exempt from compliance with secondary standards outside of the zone of discharge in accordance with Rule 62-522.300(8), F.A.C., unless the Department determines that compliance with one or more secondary standards is necessary to protect ground water used or reasonably likely to be used as a potable water source.

- For the sludge-drying basins, primary ground water quality standards specified in Chapter 62-520, F.A.C., shall be met at the edge of the zone of discharge. The zone of discharge for the sludge-drying basin shall extend horizontally along the ground surface from the edge of the basin or to the permittee's property boundary, and vertically to the base of the surficial aquifer.
- The permittee's discharge to ground water shall not cause a violation of water quality standards for ground waters at the boundary of the zone of discharge in accordance with Rules 62-520.400 and 62-520.420, F.A.C.
- The permittee's discharge to ground water shall not cause a violation of the minimum criteria for ground water specified in Rule 62-520.400, F.A.C., within the zone of discharge. Should conditions of waters within the zone of discharge warrant, as monitored via monitoring wells, the permittee may be required by the Department to upgrade, reduce or cease the discharge of effluent into the zone of discharge and adopt an alternate method of disposal.
- If the concentration for any constituent listed in Permit Condition III.B.3 in the natural background quality of the ground water is greater than the stated maximum, or in the case of pH is also less than the minimum, the representative background quality shall be the prevailing standard.
- Water levels shall be recorded prior to evacuating the well for sample collection. Elevation references shall include the top of the well casing and land surface at each well site (NGVD allowable) at a precision of plus or minus 0.1 feet.

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9. Ground water monitoring wells shall be purged prior to sampling to obtain a representative sample.
10. Analyses shall be conducted on un-filtered samples, unless filtered samples have been approved by the Department as being more representative of ground water conditions.
12. If a monitoring well becomes damaged or cannot be sampled for some reason, the permittee shall notify the Department immediately and a written report shall follow within seven days detailing the circumstances and remedial measures taken or proposed. Repair or replacement of monitoring wells shall be approved in advance by the Department.
13. All piezometers and monitoring wells not part of the approved ground water monitoring plan are to be plugged and abandoned in accordance with Rule 62-532.500(4), F.A.C., unless there is intent for their future use.
14. Ground water monitoring test results shall be submitted on Part D of DEP Form 62-620.910(10) (attached) and shall be submitted to the address specified in I.E.3. Results shall be submitted with the DMR for each month listed in the following schedule.

SAMPLE PERIOD	REPORT DUE DATE
January – March	April 28
April – June	July 28
July – September	October 28
October - December	January 28

IV. Other Land Application Requirements

This section is not applicable to this facility.

V. Operation and Maintenance Requirements

A. Operation of Treatment and Disposal Facilities

1. The permittee shall ensure that the operation of this facility is as described in the application and supporting documents.
2. The operation of the pollution control facilities described in this permit shall be under the supervision of a person who is qualified by formal training and/or practical experience in the field of water pollution control.

B. Record keeping Requirements:

1. The permittee shall maintain the following records on the site of the permitted facility and make them available for inspection:
 - a. Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least three years from the date the sample or measurement was taken;
 - b. Copies of all reports, other than those required in items a. and f. of this section, required by the permit for at least three years from the date the report was prepared, unless otherwise specified by Department rule;
 - c. Records of all data, including reports and documents used to complete the application for the permit for at least three years from the date the application was filed, unless otherwise specified by Department rule;
 - d. A copy of the current permit;
 - e. A copy of any required record drawings;

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- f. Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date on the logs or schedule.

VI. Schedules

1. A Best Management Practices Pollution Prevention (BMP3) Plan shall be prepared and implemented in accordance with Part VII of this permit and the following schedule:

Action Item		Scheduled Completion Date
1	Continue Implementing Existing BMP3 Plan	Issuance Date of Permit

2. The permittee shall achieve compliance with the other conditions of this permit as follows:

Operational level attained Issuance Date of permit

3. No later than 14 calendar days following a date identified in the above schedule(s) of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by an identified date, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.
4. In accordance with sections 403.088(2)(e) and (f), F.S., a compliance schedule for this facility is contained in Administrative Order AO-017-TL which is hereby incorporated by reference.

VII. Other Specific Conditions

A. Specific Conditions Applicable to All Permits

1. Drawings, plans, documents or specifications submitted by the permittee, not attached hereto, but retained on file at the Southeast District Office, are made a part hereof.
2. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.) Florida Statutes, applicable portions of reports to be submitted under this permit, shall be signed and sealed by the professional(s) who prepared them.
3. This permit satisfies Industrial Wastewater program permitting requirements only and does not authorize operation of this facility prior to obtaining any other permits required by local, state or federal agencies.

B. Specific Conditions Related to Construction

This section is not applicable to this facility.

C. Duty to Reapply

1. The permittee shall submit an application to renew this permit at least 180 days before the expiration date of this permit.
2. The permittee shall apply for renewal of this permit on the appropriate form listed in Rule 62-620.910, F.A.C., and in the manner established in Chapter 62-620, F.A.C., and the Department of Environmental Protection Guide to Wastewater Permitting including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C.
3. An application filed in accordance with subsections condition VII.c.1. of this part shall be considered timely and sufficient. When an application for renewal of a permit is timely and sufficient, the existing permit shall not

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expire until the Department has taken final action on the application for renewal or until the last day for seeking judicial review of the agency order or a later date fixed by order of the reviewing court.

4. The late submittal of a renewal application shall be considered timely and sufficient for the purpose of extending the effectiveness of the expiring permit only if it is submitted and made complete before the expiration date.

D. Specific Conditions Related to Best Management Practices/Pollution Prevention Conditions

1. General Conditions

In accordance with Section 304(e) and 402(a)(2) of the Clean Water Act (CWA) as amended, 33 U.S.C. §§ 1251 et seq., and the Pollution Prevention Act of 1990, 42 U.S.C. §§ 13101-13109, the permittee must develop and implement a plan for utilizing practices incorporating pollution prevention measures. References to be considered in developing the plan are "Criteria and Standards for Best Management Practices Authorized Under Section 304(e) of the Act," found at 40 CFR 122.44 Subpart K and the Waste Minimization Opportunity Assessment Manual, EPA/625/7-88/003.

a. Definitions

- (1) The term "pollutants" refers to conventional, non-conventional and toxic pollutants.
- (2) Conventional pollutants are: biochemical oxygen demand (BOD), suspended solids, pH, fecal coliform bacteria and oil & grease.
- (3) Non-conventional pollutants are those which are not defined as conventional or toxic.
- (4) Toxic pollutants include, but are not limited to: (a) any toxic substance listed in Section 307(a)(1) of the CWA, any hazardous substance listed in Section 311 of the CWA, or chemical listed in Section 313(c) of the Superfund Amendments and Reauthorization Act of 1986; and (b) any substance (that is not also a conventional or non-conventional pollutant except ammonia) for which EPA has published an acute or chronic toxicity criterion.
- (5) "Pollution prevention" and "waste minimization" refer to the first two categories of EPA's preferred hazardous waste management strategy: first, source reduction and then, recycling.
- (6) "Recycle/Reuse" is defined as the minimization of waste generation by recovering and reprocessing usable products that might otherwise become waste; or the reuse or reprocessing of usable waste products in place of the original stock, or for other purposes such as material recovery, material regeneration or energy production.
- (7) "Source reduction" means any practice which: (a) reduces the amount of any pollutant entering a waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment or disposal; and (b) reduces the hazards to public health and the environment associated with the release of such pollutant. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. It does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a pollutant through a process or activity which itself is not integral to, or previously considered necessary for, the production of a product or the providing of a service.
- (8) "BMP3" means a Best Management Plan incorporating the requirements of 40 CFR § 122.44, Subpart K, plus pollution prevention techniques associated with a Waste Minimization Assessment.
- (9) "Waste Minimization Assessment" means a systematic planned procedure with the objective of identifying ways to reduce or eliminate waste.

2. Best Management Practices/Pollution Prevention Plan

The permittee shall develop and implement a BMP3 plan for the facility, which is the source of wastewater and storm water discharges, covered by this permit. The plan shall be directed toward reducing those pollutants of

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concern which discharge to surface waters and shall be prepared in accordance with good engineering and good housekeeping practices. For the purposes of this permit, pollutants of concern shall be limited to toxic pollutants, as defined above, known to the discharger. The plan shall address all activities which could or do contribute these pollutants to the surface water discharge, including process, treatment, and ancillary activities.

a. Signatory Authority & Management Responsibilities

The BMP3 plan shall be signed by permittee or their duly authorized representative in accordance with rule 62-620.305(2)(a) and (b). The BMP3 plan shall be reviewed by the plant environmental/engineering staff and plant manager. Where required by Chapter 471(P.E.) or Chapter 492 (P.G.), F.S., applicable portions of the BMP3 plan shall be signed and sealed by the professional (s) who prepared them.

A copy of the plan shall be retained at the facility and shall be made available to the permit issuing authority upon request.

The BMP3 plan shall contain a written statement from corporate or plant management indicating management's commitment to the goals of the BMP3 program. Such statements shall be publicized or made known to all facility employees. Management shall also provide training for the individuals responsible for implementing the BMP3 plan.

b. BMP3 Plan Requirements

- (1) Name & description of facility, a map illustrating the location of the facility & adjacent receiving waters, and other maps, plot plans or drawings, as necessary;
- (2) Overall objectives (both short-term and long-term) and scope of the plan, specific reduction goals for pollutants, anticipated dates of achievement of reduction, and a description of means for achieving each reduction goal;
- (3) A description of procedures relative to spill prevention, control & countermeasures and a description of measures employed to prevent storm water contamination;
- (4) A description of practices involving preventive maintenance, housekeeping, record keeping, inspections, and plant security; and
- (5) The description of a waste minimization assessment performed in accordance with the conditions outlined in condition c below, results of the assessment, and a schedule for implementation of specific waste reduction practices.

c. Waste Minimization Assessment

The permittee is encouraged but not required to conduct a waste minimization assessment (WMA) for this facility to determine actions that could be taken to reduce waste loading and chemical losses to all wastewater and/or storm water streams as described in Part VII.D.2 of this permit.

If the permittee elects to develop and implement a WMA, information on plan components can be obtained from the Department's Industrial Wastewater website, or from:

Florida Department of Environmental Protection
Industrial Wastewater Section, Mail Station 3545
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(850) 245-8589
(850) 245-8669 – Fax

d. Best Management Practices & Pollution Prevention Committee Recommended:

A Best Management Practices Committee (Committee) should be established to direct or assist in the implementation of the BMP3 plan. The Committee should be comprised of individuals within the plant organization who are responsible for developing the BMP3 plan and assisting the plant manager in its implementation, monitoring of success, and revision. The activities and responsibilities of the Committee

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should address all aspects of the facility's BMP3 plan. The scope of responsibilities of the Committee should be described in the plan.

e. Employee Training

Employee training programs shall inform personnel at all levels of responsibility of the components & goals of the BMP3 plan and shall describe employee responsibilities for implementing the plan. Training shall address topics such as good housekeeping, materials management, record keeping & reporting, spill prevention & response, as well as specific waste reduction practices to be employed. Training should also disclose how individual employees may contribute suggestions concerning the BMP3 plan or suggestions regarding Pollution Prevention. The plan shall identify periodic dates for such training.

f. Plan Development & Implementation

The BMP3 plan shall be developed and implemented 6 months after the effective date of this permit, unless any later dates are specified in this permit. Any portion of the WMA, which is ongoing at the time of development or implementation, shall be described in the plan. Any waste reduction practice, which is recommended for implementation over a period of time, shall be identified in the plan, including a schedule for its implementation.

g. Submission of Plan Summary & Progress/Update Reports

- (1) Plan Summary: Not later than 2 years after the effective date of the permit, a summary of the BMP3 plan shall be developed and maintained at the facility and made available to the permit issuing authority upon request. The summary should include the following: a brief description of the plan, its implementation process, schedules for implementing identified waste reduction practices, and a list of all waste reduction practices being employed at the facility. The results of waste minimization assessment studies already completed as well as any scheduled or ongoing WMA studies shall be discussed.
- (2) Progress/Update Reports: Annually thereafter for the duration of the permit progress/update reports documenting implementation of the plan shall be maintained at the facility and made available to the permit issuing authority upon request. The reports shall discuss whether or not implementation schedules were met and revise any schedules, as necessary. The plan shall also be updated as necessary and the attainment or progress made toward specific pollutant reduction targets documented. Results of any ongoing WMA studies as well as any additional schedules for implementation of waste reduction practices shall be included.
- (3) A timetable for the various plan requirements follows:

Timetable for BMP3 Plan Requirements:

<u>ELEMENT</u>	<u>TIME FROM EFFECTIVE DATE OF THIS PERMIT</u>
Complete WMA (if appropriate)	6 months
Progress/Update Reports	3 years, and then annually thereafter

The permittee shall maintain the plan and subsequent reports at the facility and shall make the plan available to the Department upon request.

h. Plan Review & Modification

If following review by the Department, the BMP3 plan is determined insufficient, the permittee will be notified that the BMP3 plan does not meet one or more of the minimum requirements of this Part. Upon such notification from the Department, the permittee shall amend the plan and shall submit to the Department a written certification that the requested changes have been made. Unless otherwise provided by the Department, the permittee shall have 30 days after such notification to make the changes necessary.

The permittee shall modify the BMP3 plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to waters of the State or if the plan proves to be ineffective in achieving the general objectives of reducing pollutants in

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wastewater or storm water discharges. Modifications to the plan may be reviewed by the Department in the same manner as described above.

E. Specific Conditions Related to Existing Manufacturing, Commercial, Mining, and Silviculture Wastewater Facilities or Activities

1. Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels
 - (1) One hundred micrograms per liter,
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony, or
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application.
 - b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels
 - (1) Five hundred micrograms per liter,
 - (2) One milligram per liter for antimony, or
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

F. Reopener Clause

1. The permit shall be revised, or alternatively, revoked and reissued in accordance with the provisions contained in Rules 62-620.325 and 62-620.345 F.A.C., if applicable, or to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act (the Act), as amended, if the effluent standards, limitations, or water quality standards so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any condition in the permit/or;
 - b. Controls any pollutant not addressed in the permit.

The permit as revised or reissued under this paragraph shall contain any other requirements then applicable.

2. The permit may be reopened to adjust effluent limitations or monitoring requirements should future Water Quality Based Effluent Limitation determinations, water quality studies, DEP approved changes in water quality standards, or other information show a need for a different limitation or monitoring requirement.
3. The Department or USEPA may develop a Total Maximum Daily Load (TMDL) during the life of the permit. Once a TMDL has been established and adopted by rule, the Department shall revise this permit to incorporate the final findings of the TMDL.

VIII. General Conditions

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, F.S. Any permit noncompliance constitutes a violation of Chapter 403, F.S., and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. [62-620.610(1), F.A.C.]
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications or

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conditions of this permit constitutes grounds for revocation and enforcement action by the Department. [62-620.610(2), F.A.C.]

3. As provided in Subsection 403.087(6), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringements of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. [62-620.610(3), F.A.C.]
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [62-620.610(4), F.A.C.]
5. This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [62-620.610(5), F.A.C.]
6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. [62-620.610(6), F.A.C.]
7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. [62-620.610(7), F.A.C.]
8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Permit Condition. [62-620.610(8), F.A.C.]
9. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to
 - a. Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit;
 - b. Have access to and copy any records that shall be kept under the conditions of this permit;
 - c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and
 - d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules.[62-620.610(9), F.A.C.]
10. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, Florida Statutes, or Rule 62-620.302, F.A.C. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. [62-620.610(10), F.A.C.]

PERMITTEE:
Florida Power & Light Company
P.O. Box 176
Indiantown, FL 34956

PERMIT NUMBER: FL0030988
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11. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department. *[62-620.610(11), F.A.C.]*
12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard. *[62-620.610(12), F.A.C.]*
13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. *[62-620.610(13), F.A.C.]*
14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the Department approves the transfer. *[62-620.610(14), F.A.C.]*
15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment. *[62-620.610(15), F.A.C.]*
16. The permittee shall apply for a revision to the Department permit in accordance with Rule 62-620.300, F.A.C., and the Department of Environmental Protection Guide to Wastewater Permitting at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-620.325(2), F.A.C., for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620.300, F.A.C. *[62-620.610(16), F.A.C.]*
17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:
 - a. A description of the anticipated noncompliance;
 - b. The period of the anticipated noncompliance, including dates and times; and
 - c. Steps being taken to prevent future occurrence of the noncompliance.*[62-620.610(17), F.A.C.]*
18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate.
 - a. Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10).
 - b. If the permittee monitors any contaminate more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
 - c. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.
 - d. Any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health (DOH) under Chapter 64E-1, F.A.C., where such certification is required by Rule 62-160.300(4), F.A.C. The laboratory must be certified for any specific method and analyte combination that is

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used to comply with this permit. For domestic wastewater facilities, the on-site test procedures specified in Rule 62-160.300(4), F.A.C., shall be performed by a laboratory certified test for those parameters or under the direction of an operator certified under Chapter 62-602, F.A.C.

- e. Fields activities including on-site tests and sample collection, whether performed by a laboratory or a certified operator, must follow the applicable procedures described in DEP-SOP-001/01 (January 2002). Alternate field procedures and laboratory methods may be used where they have been approved according to the requirements of Rules 62-160.220, 62-160.330, and 62-160.600, F.A.C.
[62-620.610(18), F.A.C.]

19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. [62-620.610(19), F.A.C.]
20. The permittee shall report to the Department's Southeast District Office any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- a. The following shall be included as information which must be reported within 24 hours under this condition:
- (1) Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,
 - (2) Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and
 - (4) Any unauthorized discharge to surface or ground waters.
- b. Oral reports as required by this subsection shall be provided as follows:
- (1) For unauthorized releases or spills of untreated or treated wastewater reported pursuant to subparagraph a.4 that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the Department by calling the STATE WARNING POINT TOLL FREE NUMBER (800) 320-0519, as soon as practical, but no later than 24 hours from the time the permittee becomes aware of the discharge. The permittee, to the extent known, shall provide the following information to the State Warning Point:
 - (a) Name, address, and telephone number of person reporting;
 - (b) Name, address, and telephone number of permittee or responsible person for the discharge;
 - (c) Date and time of the discharge and status of discharge (ongoing or ceased);
 - (d) Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);
 - (e) Estimated amount of the discharge;
 - (f) Location or address of the discharge;
 - (g) Source and cause of the discharge;
 - (h) Whether the discharge was contained on-site, and cleanup actions taken to date;
 - (i) Description of area affected by the discharge, including name of water body affected, if any; and
 - (j) Other persons or agencies contacted.
 - (2) Oral reports, not otherwise required to be provided pursuant to subparagraph b(1) above, shall be provided to Department's Southeast District Office within 24 hours from the time the permittee becomes aware of the circumstances.
- c. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department's Southeast District Office shall waive the written report.

[62-620.610(20), F.A.C.]

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Florida Power & Light Company
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21. The permittee shall report all instances of noncompliance not reported under Conditions VIII. 18 and 19 of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Condition VIII. 20. of this permit. [62-620.610(21), F.A.C.]

22. Bypass Provisions.

- a. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
 - (3) The permittee submitted notices as required under Condition VIII.22.b. of this permit.
- b. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Condition VIII.20. of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.
- c. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Condition VIII.22 a. (1) through (3) of this permit.
- d. A permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of Condition VIII.22.a. through c. of this permit.
[62-620.610(22), F.A.C.]

23. Upset Provisions

- a. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in Condition VIII.20. of this permit; and
 - (4) The permittee complied with any remedial measures required under Condition VIII.5. of this permit.
- b. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- c. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.

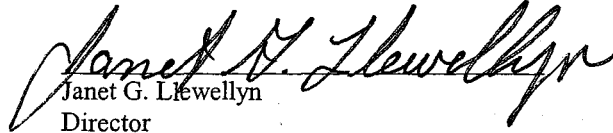
[62-620.610(23), F.A.C.]

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Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION



Janet G. Llewellyn

Director

Division of Water Resource Management

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(850) 245-8336

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: _____
CLASS SIZE: _____

To: _____
REPORT: _____
GROUP: _____
Quartry
Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd
Indiantown, FL 34956

COUNTY: Martin

MONITORING GROUP NUMBER: D-001 Cooling Pond Overflow
PLANT SIZE/TREATMENT TYPE: _____

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration		Units	No	Frequency of	Sample
							Ex	Analysis	Type
Flow	Sample Measurement								
PARM Code 50050 1 Mon. Site No. EFF-1	Permit Requirement	Report Daily Maximum	mgd					Daily, When Discharging	Calculator
Temperature	Sample Measurement								
PARM Code 00011 1 Mon. Site No. EFF-1A	Permit Requirement					92.0		2/Day of Discharge	Grab
Temperature, Water Ambient (DEG.F)	Sample Measurement					Report Daily Maximum	deg F	2/Day of Discharge	Calculated
PARM Code 00011 1 Mon. Site No. SWA-1						Report Daily Maximum	deg F	2/Day of Discharge	Calculated
Temperature Rise	Sample Measurement								
PARM Code 61576 1 Mon. Site No. EFF-1A, SWA-1	Permit Requirement					5.0 Daily Maximum	deg F	2/Day of Discharge	Grab
Chlorine, Total Residual	Sample Measurement								
PARM Code 50060 1 Mon. Site No. EFF-1	Permit Requirement					Report Daily Maximum	mg/l	Daily, When Discharging	Grab
Specific Conductance	Sample Measurement								
PARM Code 00095 1 Mon. Site No. EFF-1	Permit Requirement					Report Daily Maximum	umho/cm	Weekly	Grab
Oxygen, Dissolved (DO)	Sample Measurement								
PARM Code 00300 1 Mon. Site No. EFF-1	Permit Requirement	Report Daily Minimum					mg/l	Weekly	Grab
pH	Sample Measurement								
PARM Code 00400 1 Mon. Site No. EFF-1	Permit Requirement	Report Daily Minimum				Report Daily Maximum	su	Weekly	Grab

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (YY/MM/DD)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-001

Parameter	Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample T.
Phosphorus, Total (as P)	Sample Measurement							
PARM Code 00665 1	Permit Requirement							
Mon. Site No. EFF-1	Sample Measurement				Report Daily Maximum	mg/l	Weekly	Grab
Phosphate, Ortho (as PO ₄)	Sample Measurement							
PARM Code 70507 1	Permit Requirement							
Mon. Site No. EFF-1	Sample Measurement				Report Daily Maximum	mg/l	Weekly	Grab
Oil and Grease	Sample Measurement							
PARM Code 00556 1	Permit Requirement							
Mon. Site No. EFF-1	Sample Measurement				Report Daily Maximum	mg/l	Weekly	Grab
Nitrogen, Ammonia, Total (as NH ₄)	Sample Measurement							
PARM Code 00610 1	Permit Requirement							
Mon. Site No. EFF-1	Sample Measurement				Report Daily Maximum	mg/l	Weekly	Grab
Ammonia, Unionized (as NH ₃)	Sample Measurement							
PARM Code 00619 1	Permit Requirement							
Mon. Site No. EFF-1	Sample Measurement				Report Daily Maximum	mg/l	Weekly	Calculate
Nitrogen, Total (as N)	Sample Measurement							
PARM Code 00600 1	Permit Requirement							
Mon. Site No. EFF-1	Sample Measurement				Report Daily Maximum	mg/l	Weekly	Grab
Nitrogen, Nitrite, Total (as N)	Sample Measurement							
PARM Code 00615 1	Permit Requirement							
Mon. Site No. EFF-1	Sample Measurement				Report Daily Maximum	mg/l	Weekly	Grab
Nitrogen, Nitrate, Total (as NO ₃)	Sample Measurement							
PARM Code 00620 1	Permit Requirement							
Mon. Site No. EFF-1	Sample Measurement				Report Daily Maximum	mg/l	Weekly	Grab
Arsenic, Total Recoverable	Sample Measurement							
PARM Code 00978 1	Permit Requirement							
Mon. Site No. EFF-1	Sample Measurement				Report Daily Maximum	ug/l	Weekly	Grab
Cadmium, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01113 1	Permit Requirement							
Mon. Site No. EFF-1	Sample Measurement				Report Monthly Average	ug/l	Weekly	Grab

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-001

Parameter	Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample Type
Cadmium, Total Recoverable (calc. limit as $Cd \leq e^{(0.07409 \ln H - 4.719)}$)								
PARM Code 01113 P Mon Site No. EFF-1	Permit Requirement		Report Monthly Average	Report Daily Maximum	ug/l		Weekly	Grab
Cadmium, Total Recoverable (effluent minus calculated limit)	Sample							
PARM Code 01113 Q Mon Site No. EFF-1	Permit Requirement			0.00 Daily Maximum	ug/l		Weekly	Grab
Chromium, Total Recoverable (effluent)	Sample							
PARM Code 01118 I Mon Site No. EFF-1	Permit Requirement		Report Monthly Average	Report Daily Maximum	ug/l		Weekly	Grab
Chromium, Total Recoverable (calc. limit as $Cr \leq e^{(0.819 \ln H - 0.6643)}$)								
PARM Code 01113 P Mon Site No. EFF-1	Permit Requirement		Report Monthly Average	Report Daily Maximum	ug/l		Weekly	Grab
Chromium, Total Recoverable (effluent minus calculated limit)	Sample							
PARM Code 01113 Q Mon Site No. EFF-1	Permit Requirement			0.00 Daily Maximum	ug/l		Weekly	Grab
Copper, Total Recoverable (effluent)	Sample							
PARM Code 01119 I Mon Site No. EFF-1	Permit Requirement		Report Monthly Average	Report Daily Maximum	ug/l		Weekly	Grab
Copper, Total Recoverable (calc. limit as $Cu \leq e^{(0.555 \ln H - 1.702)}$)								
PARM Code 01113 P Mon Site No. EFF-1	Permit Requirement		Report Monthly Average	Report Daily Maximum	ug/l		Weekly	Grab
Mercury, Total Recoverable	Sample							
PARM Code 71901 I Mon Site No. EFF-1	Permit Requirement		Report Monthly Average	Report Daily Maximum	ug/l		Weekly	Grab
Zinc, Total Recoverable	Sample							
PARM Code 01094 I Mon Site No. EFF-1	Permit Requirement		Report Monthly Average	Report Daily Maximum	ug/l		Weekly	Grab
Zinc, Total Recoverable (calc. limit as $Zn \leq e^{(0.555 \ln H - 0.889)}$)								
PARM Code 01113 P Mon Site No. EFF-1	Permit Requirement		Report Monthly Average	Report Daily Maximum	ug/l		Weekly	Grab
Zinc, Total Recoverable (effluent minus calculated limit)	Sample							
PARM Code 01113 Q Mon Site No. EFF-1	Permit Requirement			0.00 Daily Maximum	ug/l		Weekly	Grab
Lead, Total Recoverable	Sample							

Parameter		Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample Type
PARM Code 01114 Mon. Site No. EFF-1	Permit Requirement			Report Monthly Average	Report Daily Maximum	ug/l		Weekly	Grab
Lead, Total Recoverable (calc. limit as PbSe ^(1.273lnH-0.4705))									
PARM Code 01114 Mon. Site No. EFF-1	Permit Requirement			Report Monthly Average	Report Daily Maximum	ug/l		Weekly	Grab
Lead, Total Recoverable (effluent minus calculated limit)	Sample Measurement								
PARM Code 01113 Mon. Site No. EFF-1	Permit Requirement				0.00 Daily Maximum	ug/l		Weekly	Grab
Iron, Total Recoverable	Sample Measurement								
PARM Code 00980 Mon. Site No. EFF-1	Permit Requirement			Report Monthly Average	Report Daily Maximum	mg/l		Weekly	Grab
Selenium, Total Recoverable	Sample Measurement								
PARM Code 00981 Mon. Site No. EFF-1	Permit Requirement			Report Monthly Average	Report Daily Maximum	ug/l		Weekly	Grab
Hardness, Total (as CaCO3)	Sample Measurement								
PARM Code 00900 Mon. Site No. EFF-1	Permit Requirement				Report Daily Maximum	mg/l		Weekly	Grab
Chloride (as Cl)	Sample Measurement								
PARM Code 00940 Mon. Site No. EFF-1	Permit Requirement				Report Daily Maximum	mg/l		Weekly	Grab

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-001

Parameter		Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Sulfate, Total	Sample Measurement							
PARM Code 00945 1 Mon. Site No. EFF-1	Permit Requirement			Report Daily Maximum	mg/l		Weekly	Grab
Sodium	Sample Measurement							
PARM Code 00923 1 Mon. Site No. EFF-1	Permit Requirement			Report Daily Maximum	mg/l		Weekly	Grab
Solids, Total Suspended	Sample Measurement							
PARM Code 00530 1 Mon. Site No. EFF-1	Permit Requirement			Report Daily Maximum	mg/l		Weekly	Grab
Solids, Total Dissolved (TDS)	Sample Measurement							
PARM Code 70295 1 Mon. Site No. EFF-1	Permit Requirement			Report Daily Maximum	mg/l		Weekly	Grab
Turbidity	Sample Measurement							
PARM Code 00070 1 Mon. Site No. EFF-1	Permit Requirement			Report Daily Maximum	ntu		Weekly	Grab

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From:
LIMIT: Final
CLASS SIZE: Major

To:
REPORT:
GROUP: Quarterly
Industrial

COUNTY: Martin

MONITORING GROUP NUMBER: D-02B Weir a
PLANT SIZE/TREATMENT TYPE:

☐ - check if no discharge for reporting period

Parameter	Sample Measurement	Report Monthly Average	Report Daily-Maximum	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Samp Type
Flow	Sample Measurement								
PARM Code 50050 1 Mon. Site No. EFF-3*	Permit Requirement	Monthly Average	Daily-Maximum	mgd				Weekly	Totaliz
Temperature	Sample Measurement								
PARM Code 00011 1 Mon. Site No. EFF-3	Permit Requirement					92.0	Daily Maximum	2/Month	Grab
Specific Conductance	Sample Measurement								
PARM Code 00095 1 Mon. Site No. EFF-3	Permit Requirement					1275	Daily Maximum	Monthly	Grab
Oxygen, Dissolved (DO)	Sample Measurement								
PARM Code 00300 1 Mon. Site No. EFF-3	Permit Requirement					5.0	Daily Minimum	Monthly	Grab
pH	Sample Measurement								
PARM Code 00400 1 Mon. Site No. EFF-3*	Permit Requirement					6.0	Daily Minimum	Monthly	Grab
Phosphorus, Total (as P)	Sample Measurement								
PARM Code 00665 1 Mon. Site No. EFF-3	Permit Requirement							Monthly	Grab
Phosphate, Ortho (as PO ₄)	Sample Measurement								
PARM Code 70507 1 Mon. Site No. EFF-3	Permit Requirement							Monthly	Grab
Oil and Grease	Sample Measurement								
PARM Code 00556 1 Mon. Site No. EFF-3	Permit Requirement					5.0	Daily Maximum	Monthly	Grab
Nitrogen, Ammonia, Total (as NH ₄)	Sample Measurement								
PARM Code 00610 1 Mon. Site No. EFF-3	Permit Requirement							Monthly	Grab

* Flow is the cumulative flows from D-02B, D-02C and D-02D and pH is the summary of individual values from D-02B, D-02C and D-02D.

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-02B

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample Type
Ammonia, Unionized (NH ₃)	Sample Measurement								
PARM Code 00619 Mon. Site No. EFP-3	Permit Requirement			0.02	Daily Maximum	mg/l		Monthly	Calculated
Nitrogen, Total (NH ₄)	Sample Measurement								
PARM Code 00600 Mon. Site No. EFP-3	Permit Requirement			Report	Daily Maximum	mg/l		Monthly	Grab
Nitrogen, Nitrite, Total (as N)	Sample Measurement								
PARM Code 00615 Mon. Site No. EFP-3	Permit Requirement			Report	Daily Maximum	mg/l		Monthly	Grab
Nitrogen, Nitrate, Total (as N)	Sample Measurement								
PARM Code 00620 Mon. Site No. EFP-3	Permit Requirement			Report	Daily Maximum	mg/l		Monthly	Grab
Arsenic, Total Recoverable	Sample Measurement								
PARM Code 00978 Mon. Site No. EFP-3	Permit Requirement			0.05	Daily Maximum	mg/l		Monthly	Grab
Cadmium, Total Recoverable (effluent)	Sample Measurement								
PARM Code 01113 Mon. Site No. EFP-3	Permit Requirement			Report	Daily Maximum	µg/L		Monthly	Grab
Cadmium, Total Recoverable (calc. limit as Cd≤ ^{(0.752(mH₃-49))}	Sample Measurement								
PARM Code 01113 Mon. Site No. EFP-3	Permit Requirement			Daily Maximum		µg/L		Monthly	Calculated
Cadmium, Total Recoverable (effluent minus calculated limit)	Sample Measurement								
PARM Code 01113 Mon. Site No. EFP-3	Permit Requirement			0.00	Daily Maximum	µg/L		Monthly	Calculated
Chromium, Total Recoverable (effluent)	Sample Measurement								
PARM Code 04262 Mon. Site No. EFP-3	Permit Requirement			Report	Daily Maximum	µg/L		Monthly	Grab
Chromium, Total Recoverable (calc. limit as Cr≤ ^{(0.819m(EFP-1.561))}	Sample Measurement								
PARM Code 04262 Mon. Site No. EFP-3	Permit Requirement			Report	Daily Maximum	µg/L		Monthly	Calculated
Chromium, Total Recoverable (effluent minus calculated limit)	Sample Measurement								
PARM Code 04262 Mon. Site No. EFP-3	Permit Requirement			0.00	Daily Maximum	µg/L		Monthly	Calculated

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-02B

Parameter	Quantity or Loading	Units	Quality or Concentration	Units	N o. Ex	Frequency of Analysis	Sample Ty
Copper, Total Recoverable (effluent)	Sample Measurement						
PARM Code 01119 1 Mon. Site No. EFF-3	Permit Requirement		Report Daily Maximum	µg/L		Monthly	Grab
Copper, Total Recoverable (calc. limit as CuSe ^(0.8341mH-1.463))	Sample Measurement						
PARM Code 01119 P Mon. Site No. EFF-3	Permit Requirement		Report Daily Maximum	µg/L		Monthly	Calculated
Copper, Total Recoverable (effluent minus calculated limit)	Sample Measurement						
PARM Code 01119 Q Mon. Site No. EFF-3	Permit Requirement		0.00 Daily Maximum	µg/L		Monthly	Calculated
Mercury, Total Recoverable	Sample Measurement						
PARM Code 71901 1 Mon. Site No. EFF-3	Permit Requirement		0.012 Daily Maximum	µg/L		Monthly	Grab
Zinc, Total Recoverable (effluent)	Sample Measurement						
PARM Code 01094 1 Mon. Site No. EFF-3	Permit Requirement		Report Daily Maximum	µg/L		Monthly	Grab
Zinc, Total Recoverable (calc. limit as ZnSe ^(0.8471mH-10.7614))	Sample Measurement						
PARM Code 01094 P Mon. Site No. EFF-3	Permit Requirement		Report Daily Maximum	µg/L		Monthly	Calculated
Zinc, Total Recoverable (effluent minus calculated limit)	Sample Measurement						
PARM Code 01094 Q Mon. Site No. EFF-3	Permit Requirement		0.00 Daily Maximum	µg/L		Monthly	Calculated
Lead, Total Recoverable (effluent)	Sample Measurement						
PARM Code 01114 1 Mon. Site No. EFF-3	Permit Requirement		Report Daily Maximum	µg/L		Monthly	Grab
Lead, Total Recoverable (calc. limit as Pb Se ^(1.2731mH-4.703))	Sample Measurement						
PARM Code 01114 P Mon. Site No. EFF-3	Permit Requirement		Report Daily Maximum	µg/L		Monthly	Calculated
Lead, Total Recoverable (effluent minus calculated limit)	Sample Measurement						
PARM Code 01114 Q Mon. Site No. EFF-3	Permit Requirement		0.00 Daily Maximum	µg/L		Monthly	Calculated

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-02B

Parameter	Sample Measurement	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Ty
Iron, Total Recoverable	Sample Measurement							
PARM Code 00980 1 Mon. Site No. EFF-3	Permit Requirement			1.0 Daily Maximum	mg/l		Monthly	Grab
Selenium, Total Recoverable	Sample Measurement							
PARM Code 00981 1 Mon. Site No. EFF-3	Permit Requirement			5.0 Daily Maximum	µg/L		Monthly	Grab
Hardness, Total (as CaCO ₃)	Sample Measurement							
PARM Code 00980 1 Mon. Site No. EFF-3	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Chloride (as Cl)	Sample Measurement							
PARM Code 00940 1 Mon. Site No. EFF-3	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Sodium	Sample Measurement							
PARM Code 00923 1 Mon. Site No. EFF-3	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Solids, Total Suspended	Sample Measurement							
PARM Code 00530 1 Mon. Site No. EFF-3	Permit Requirement			100.0 Daily Maximum	mg/l		Monthly	Grab
Solids, Total Dissolved (TDS)	Sample Measurement							
PARM Code 70295 1 Mon. Site No. EFF-3	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Sulfate, Total	Sample Measurement							
PARM Code 00945 1 Mon. Site No. EFF-3	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Turbidity	Sample Measurement							
PARM Code 00070 1 Mon. Site No. EFF-3	Permit Requirement			Report Daily Maximum	ntu		Monthly	Grab

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

PERMIT NUMBER: FL0030988

MONITORING PERIOD From:

LIMIT:

CLASS SIZE:

Final
Major

To:
REPORT:
GROUP:

Quarterly
Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

COUNTY: Martin

MONITORING GROUP NUMBER: D-02C Weir b
PLANT SIZE/TREATMENT TYPE:

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Typ.
Temperature	Sample Measurement							
PARM Code 00011 1 Mon. Site No. EFF-4	Permit Requirement			92.0 Daily Maximum	deg F		2/Month	Grab
Specific Conductance	Sample Measurement							
PARM Code 00095 1 Mon. Site No. EFF-4	Permit Requirement			1275 Daily Maximum	umhos/cm		Monthly	Grab
Oxygen, Dissolved (DO)	Sample Measurement							
PARM Code 00300 1 Mon. Site No. EFF-4	Permit Requirement		5.0 Daily Minimum		mg/l		Monthly	Grab
Phosphorus, Total (as PO ₄)	Sample Measurement							
PARM Code 00665 1 Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Phosphate, Ortho (as P)	Sample Measurement							
PARM Code 70507 1 Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Oil and Grease	Sample Measurement							
PARM Code 00556 1 Mon. Site No. EFF-4	Permit Requirement			5.0 Daily Maximum	mg/l		Monthly	Grab
Nitrogen, Ammonia, Total (as NH ₄)	Sample Measurement							
PARM Code 00610 1 Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-02C

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Ammonia, Unionized (as NH ₃)	Sample Measurement							
PARM Code 00619 1 Mon. Site No. EFF-4	Permit Requirement			0.02 Daily Maximum	mg/l		Monthly	Calculated
Nitrogen, Total	Sample Measurement							
PARM Code 00600 1 Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Nitrogen, Nitrite, Total (as N)	Sample Measurement							
PARM Code 00615 1 Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Nitrogen, Nitrate, Total (as N)	Sample Measurement							
PARM Code 00620 1 Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Arsenic, Total Recoverable	Sample Measurement							
PARM Code 00978 1 Mon. Site No. EFF-4	Permit Requirement			50 Monthly Average	ug/l		Monthly	Grab
Cadmium, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01113 1 Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	ug/L		Monthly	Grab
Cadmium, Total Recoverable (calc. limit as CdSe ⁽⁰⁷⁴⁰²⁹⁴⁻⁴⁻⁷¹⁷⁾)	Sample Measurement							
PARM Code 01113 P Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	ug/L		Monthly	Calculated
Cadmium, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01113 Q Mon. Site No. EFF-4	Permit Requirement			0.00 Daily Maximum	ug/L		Monthly	Calculated
Chromium, Total Recoverable (effluent)	Sample Measurement							
PARM Code 04262 1 Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	ug/L		Monthly	Grab
Chromium, Total Recoverable (calc. limit as CrSe ⁽⁰³¹⁹⁰⁴⁹¹⁻⁰⁻⁶⁸⁴⁸⁾)	Sample Measurement							
PARM Code 04262 P Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	ug/L		Monthly	Calculated
Chromium, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 04262 Q Mon. Site No. EFF-4	Permit Requirement			0.00 Daily Maximum	ug/L		Monthly	Calculated

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-02C

Parameter	Sample Measurement	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Ty
Copper, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01119 1 Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	µg/L		Monthly	Grab
Copper, Total Recoverable (calc. limit as $Cu \leq (0.8351 \text{ mg/l} \cdot 1.702)$)	Sample Measurement							
PARM Code 01119 P Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	µg/L		Monthly	Calculated
Copper, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01119 Q Mon. Site No. EFF-4	Permit Requirement			0.00 Daily Maximum	µg/L		Monthly	Calculated
Mercury, Total Recoverable	Sample Measurement							
PARM Code 71901 1 Mon. Site No. EFF-4	Permit Requirement			0.012 Daily Maximum	µg/L		Monthly	Grab
Zinc, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01094 1 Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	µg/L		Monthly	Grab
Zinc, Total Recoverable (calc. limit as $Zn \leq (0.8473 \text{ mg/l} \cdot 0.884)$)	Sample Measurement							
PARM Code 01094 P Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	µg/L		Monthly	Calculated
Zinc, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01094 Q Mon. Site No. EFF-4	Permit Requirement			0.00 Daily Maximum	µg/L		Monthly	Calculated
Lead, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01114 1 Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	µg/L		Monthly	Grab
Lead, Total Recoverable (calc. limit as $Pb \leq (1.771 \text{ mg/l} \cdot 4.705)$)	Sample Measurement							
PARM Code 01114 P Mon. Site No. EFF-4	Permit Requirement			Report Daily Maximum	µg/L		Monthly	Calculated
Lead, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01114 Q Mon. Site No. EFF-4	Permit Requirement			0.00 Daily Maximum	µg/L		Monthly	Calculated

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-02C

Parameter		Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample Ty
Iron, Total Recoverable	Sample Measurement								
PARM Code 00980 1 Mon. Site No. EFF-4	Permit Requirement			1.0	Daily Maximum	mg/l		Monthly	Grab
Selenium, Total Recoverable	Sample Measurement								
PARM Code 00981 1 Mon. Site No. EFF-4	Permit Requirement			5.0	Daily Maximum	µg/l		Monthly	Grab
Hardness, Total (as CaCO ₃)	Sample Measurement								
PARM Code 00900 1 Mon. Site No. EFF-4	Permit Requirement								
Chloride (as Cl)	Sample Measurement								
PARM Code 00940 1 Mon. Site No. EFF-4	Permit Requirement								
Sodium	Sample Measurement								
PARM Code 00923 1 Mon. Site No. EFF-4	Permit Requirement								
Solids, Total Suspended	Sample Measurement								
PARM Code 00530 1 Mon. Site No. EFF-4	Permit Requirement			100.0	Daily Maximum	mg/l		Monthly	Grab
Solids, Total Dissolved (TDS)	Sample Measurement								
PARM Code 70295 1 Mon. Site No. EFF-4	Permit Requirement								
Sulfate, Total	Sample Measurement								
PARM Code 00945 1 Mon. Site No. EFF-4	Permit Requirement								
Turbidity	Sample Measurement								
PARM Code 00070 1 Mon. Site No. EFF-4	Permit Requirement								

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

PERMIT NUMBER: FL0030988

MONITORING PERIOD From:

Final

To: REPORT:

LIMIT:

Major

GROUP:

Quarterly Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

MONITORING GROUP NUMBER: D-02D Weir c
PLANT SIZE/TREATMENT TYPE:

COUNTY: Martin

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Temperature	Measurement							
PARM Code 00011 1	Permit Requirement			92.0	deg.F		2/Month	Grab
Mon. Site No. EFP-5	Sample			Daily Maximum				
Specific Conductance	Measurement							
PARM Code 00095 1	Permit Requirement			1275	umhos/cm		Monthly	Grab
Mon. Site No. EFP-5	Sample			Daily Maximum				
Oxygen, Dissolved (DO)	Measurement							
PARM Code 00300 1	Permit Requirement		5.0		mg/l		Monthly	Grab
Mon. Site No. EFP-5	Sample		Daily Minimum					
Phosphorus, Total (as P)	Measurement							
PARM Code 00665 1	Permit Requirement			Report	mg/l		Monthly	Grab
Mon. Site No. EFP-5	Sample			Daily Maximum				
Phosphate, Ortho (as PO ₄)	Measurement							
PARM Code 70507 1	Permit Requirement			Report	mg/l		Monthly	Grab
Mon. Site No. EFP-5	Sample			Daily Maximum				
Oil and Grease	Measurement							
PARM Code 00556 1	Permit Requirement			5.0	mg/l		Monthly	Grab
Mon. Site No. EFP-5	Sample			Daily Maximum				
Nitrogen, Ammonia, Total (as NH ₄)	Measurement							
PARM Code 00610 1	Permit Requirement			Report	mg/l		Monthly	Grab
Mon. Site No. EFP-5	Sample			Daily Maximum				

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-02D

Parameter	Sample Measurement	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Ammonia, Unionized	Sample Measurement							
PARM Code 00619 1 Mon. Site No. EFF-5	Permit Requirement			0.02 Daily Maximum	mg/l		Monthly	Calculated
Nitrogen, Total (as NH ₄)	Sample Measurement							
PARM Code 00600 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Nitrogen, Nitrite, Total (as N)	Sample Measurement							
PARM Code 00615 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Nitrogen, Nitrate, Total (as N)	Sample Measurement							
PARM Code 00620 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Arsenic, Total Recoverable	Sample Measurement							
PARM Code 00978 1 Mon. Site No. EFF-5	Permit Requirement			50 Monthly Average	ug/l		Monthly	Grab
Cadmium, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01113 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	ug/L		Monthly	Grab
Cadmium, Total Recoverable (calc. limit as Cd≤(819/1000000))	Sample Measurement							
PARM Code 01113 P Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	ug/L		Monthly	Calculated
Cadmium, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01113 Q Mon. Site No. EFF-5	Permit Requirement			0.00 Daily Maximum	ug/L		Monthly	Calculated
Chromium, Total Recoverable (effluent)	Sample Measurement							
PARM Code 04262 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	ug/L		Monthly	Grab
Chromium, Total Recoverable (calc. limit as Cr≤(819/1000000))	Sample Measurement							
PARM Code 04262 P Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	ug/L		Monthly	Calculated
Chromium, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 04262 Q Mon. Site No. EFF-5	Permit Requirement			0.00 Daily Maximum	ug/L		Monthly	Calculated

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-02D

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Ty
Copper, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01119 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	µg/L		Monthly	Grab
Copper, Total Recoverable (calc. limit as CuSe ^(0.854[mH]-1.702))	Sample Measurement							
PARM Code 01119 P Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	µg/L		Monthly	Calculated
Copper, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01119 Q Mon. Site No. EFF-3	Permit Requirement			0.00 Daily Maximum	µg/L		Monthly	Calculated
Mercury, Total Recoverable	Sample Measurement							
PARM Code 71901 1 Mon. Site No. EFF-5	Permit Requirement			0.012 Daily Maximum	µg/L		Monthly	Grab
Zinc, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01094 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	µg/L		Monthly	Grab
Zinc, Total Recoverable (calc. limit as ZnSe ^(0.847[mH]-0.384))	Sample Measurement							
PARM Code 01094 P Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	µg/L		Monthly	Calculated
Zinc, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01094 Q Mon. Site No. EFF-3	Permit Requirement			0.00 Daily Maximum	µg/L		Monthly	Calculated
Lead, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01114 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	µg/L		Monthly	Grab
Lead, Total Recoverable (calc. limit as PbSe ^(1.272[mH]-4.705))	Sample Measurement							
PARM Code 01114 P Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	µg/L		Monthly	Calculated
Lead, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01114 Q Mon. Site No. EFF-5	Permit Requirement			0.00 Daily Maximum	µg/L		Monthly	Calculated

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-02D

Parameter		Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Iron, Total Recoverable	Sample Measurement							
PARM Code 00980 1 Mon. Site No. EFF-5	Permit Requirement			1.0 Daily Maximum	mg/l		Monthly	Grab
Selenium, Total Recoverable	Sample Measurement							
PARM Code 00981 1 Mon. Site No. EFF-5	Permit Requirement			5.0 Daily Maximum	µg/L		Monthly	Grab
Hardness, Total (as CaCO ₃)	Sample Measurement							
PARM Code 00900 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Chloride (as Cl)	Sample Measurement							
PARM Code 00940 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Sodium	Sample Measurement							
PARM Code 00923 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Solids, Total Suspended	Sample Measurement							
PARM Code 00530 1 Mon. Site No. EFF-5	Permit Requirement			100.0 Daily Maximum	mg/l		Monthly	Grab
Solids, Total Dissolved (TDS)	Sample Measurement							
PARM Code 70295 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Sulfate, Total	Sample Measurement							
PARM Code 00945 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	mg/l		Monthly	Grab
Turbidity	Sample Measurement							
PARM Code 00070 1 Mon. Site No. EFF-5	Permit Requirement			Report Daily Maximum	ntu		Monthly	Grab

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

PERMIT NUMBER: FL0030988

MONITORING PERIOD From:

LIMIT:

CLASS SIZE:

Final
Major

To:
REPORT:

GROUP:

Monthly
Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

MONITORING GROUP NUMBER: D-03D Sump 18
PLANT SIZE/TREATMENT TYPE:

COUNTY: Martin

☐ - check if no discharge for reporting period

Parameter	Sample Measurement	Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample Type
Temperature	Sample Measurement								
PARM Code 00011 1 Mon. Site No. EFF-6*	Permit Requirement					92.0 Daily Maximum	Deg. F	Monthly	Grab
pH	Sample Measurement								
PARM Code 004000 1 Mon. Site No. EFF-6*	Permit Requirement			6.0 Daily Minimum		8.5 Daily Maximum	su	Monthly	Grab
Ammonia, Unionized (as NH ₃)	Sample Measurement								
PARM Code 00619 1 Mon. Site No. EFF-6	Permit Requirement					Report Daily Maximum	mg/l	Monthly	Grab
Iron, Total Recoverable	Sample Measurement								
PARM Code 00980 1 Mon. Site No. EFF-6**	Permit Requirement					4.8 Daily Maximum	mg/l	Monthly	Grab

* Temperature and pH is a summary of individual values from D-03D (sump 18 only) and D-03E (sump 25 only).

** Sump 17 when discharging.

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (YY/MM/DD)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: P.O. Box 176
Indiantown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: _____
CLASS SIZE: _____

FACILITY: Martin Power Plant
LOCATION: 5 miles Northwest of Indiantown off SR710
Indiantown, FL 34956

To: _____
REPORT: _____
GROUP: _____
Monthly
Industrial

COUNTY: Martin

MONITORING GROUP NUMBER: D-03E Sump 25
PLANT SIZE/TREATMENT TYPE: _____

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Ammonia, Unionized (as NH ₃)	Measurement							
PARM Code 00619 P	Permit Requirement				0.02	mg/l	Monthly	Calculated
Mon Site No. EFF-7					Daily Maximum			

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: Final _____
CLASS SIZE: Major

To: _____
REPORT: _____
GROUP: Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S. W. Warfield Blvd.
Indiantown, FL 34956

COUNTY: Martin

MONITORING GROUP NUMBER: D-03D Sump 18
PLANT SIZE/TREATMENT TYPE: _____

☐ - check if no discharge for reporting period

Parameter	Sample Measurement	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Oil & Grease	Sample Measurement							
PARM Code 00556 1 Mon. Site No. EFF-6	Permit Requirement			5.0 Maximum	mg/l		Quarterly	Grab
Nitrogen, Ammonia, Total (asNH ₃)	Sample Measurement							
PARM Code 00610 1 Mon. Site No. EFF-6	Permit Requirement			Report Daily Maximum	mg/l		Quarterly	Grab
Selenium, Total Recoverable	Sample Measurement							
PARM Code 00981 1 Mon. Site No. EFF-6	Permit Requirement			5.0 Daily Maximum	µg/l		Quarterly	Grab

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: _____
CLASS SIZE: _____

To: _____
REPORT: _____
GROUP: _____
Quarterly
Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

COUNTY: Martin

MONITORING GROUP NUMBER: D-03E Sump 25
PLANT SIZE/TREATMENT TYPE: _____

☐ - check if no discharge for reporting period

Parameter	Sample Measurement	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Oil and Grease	Sample Measurement							
PARM Code 00556 P Mon. Site No. EFF-7	Permit Requirement			5.0 Daily Maximum	mg/l		Quarterly	Grab
Nitrogen, Ammonia, Total (asN)	Sample Measurement							
PARM Code 00610 P Mon. Site No. EFF-7	Permit Requirement			Report Daily Maximum	mg/l		Quarterly	Grab
Iron, Total Recoverable	Sample Measurement							
PARM Code 00980 P Mon. Site No. EFF-7	Permit Requirement			1.0 Daily Maximum	mg/l		Quarterly	Grab
Selenium Total Recoverable	Sample Measurement							
PARM Code 00981 P Mon. Site No. EFF-7	Permit Requirement			5.0 Daily Maximum	µg/l		Quarterly	Grab

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: _____
CLASS SIZE: Major

To: _____
REPORT: _____
GROUP: Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

COUNTY: Martin

MONITORING GROUP NUMBER: D-03D Sump 18
PLANT SIZE/TREATMENT TYPE: _____

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Arsenic, Total Recoverable	Sample Measurement							
PARM Code 00978 1	Permit Requirement			50	µg/l		1/6 Months	Grab
Mon. Site No. EFF-6	Permit Requirement			Monthly Average				
Hardness, Total (CaCO ₃)	Permit Requirement							
PARM Code 00900 P	Permit Requirement			Report Daily Maximum	mg/l		1/6 Months	Grab
Mon. Site No. EFF-6	Sample Measurement							
Cadmium, Total Recoverable (effluent)	Sample Measurement			Report Daily Maximum	µg/l		1/6 Months	Grab
PARM Code 01113 1	Permit Requirement							
Mon. Site No. EFF-6	Sample Measurement							
Cadmium, Total Recoverable (calc. limit as Cd 56 ^{(0.009091)(4.719)})	Sample Measurement			Report Daily Maximum	µg/l		1/6 Months	Calculate
PARM Code 01113 P	Permit Requirement							
Mon. Site No. EFF-6	Sample Measurement							
Cadmium, Total Recoverable (effluent minus calculated Limit)	Sample Measurement			0.00	µg/l		1/6 Months	Calculate
PARM Code 01113 Q	Permit Requirement			Daily Maximum				
Mon. Site No. EFF-6	Permit Requirement							

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (YY/MM/DD)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-03D

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Chromium, Total Recoverable (effluent)	Sample Measurement							
PARM Code 04262 1	Permit Requirement			Report Daily Maximum	µg/l		1/6 Months	Grab
Mon. Site No. EFF-6								
Chromium, Total Recoverable (calc. limit as Cr $\leq 6^{(0.7409 \ln \text{PFI} - 4.719)}$)	Sample Measurement							
PARM Code 04262 P	Permit Requirement			Report Daily Maximum	µg/l		1/6 Months	Calculat
Mon. Site No. EFF-6								
Chromium, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 04262 Q	Permit Requirement			0.00 Daily Maximum	µg/l		1/6 Months	Calculat
Mon. Site No. EFF-6								
Copper, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01119 1	Permit Requirement			Report Daily Maximum	µg/l		1/6 Months	Grab
Mon. Site No. EFF-6								
Copper, Total Recoverable (calc. limit as Cu $\leq 6^{(0.8545 \ln \text{PFI} - 1.702)}$)	Sample Measurement							
PARM Code 01119 P	Permit Requirement			Report Daily Maximum	µg/l		1/6 Months	Calculat
Mon. Site No. EFF-6								
Copper, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01119 Q	Permit Requirement			0.0 Daily Maximum	µg/l		1/6 Months	Calculat
Mon. Site No. EFF-6								
Solids, Total Suspended	Sample Measurement							
PARM Code 00530 1	Permit Requirement			Report Daily Maximum	Mg/l		1/6 Months	Grab
Mon. Site No. EFF-6								

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: Final _____
CLASS SIZE: Major

To: _____
REPORT: _____
GROUP: _____
Semi-Annual
Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

COUNTY: Martin

MONITORING GROUP NUMBER: D-03E Sump 25
PLANT SIZE/TREATMENT TYPE: _____

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Arsenic, Total Recoverable	Measurement							
PARM Code 00978 P	Permit Requirement			50	µg/l		1/6 Months	Grab
Mon. Site No. EFF-7	Permit Requirement			Monthly Average				
Hardness, Total (CaCO ₃)	Measurement							
PARM Code 00900 P	Permit Requirement			Report Daily Maximum	mg/l		1/6 Months	Grab
Mon. Site No. EFF-7	Permit Requirement							
Cadmium, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01113 R	Permit Requirement			Report Daily Maximum	µg/l		1/6 Months	Grab
Mon. Site No. EFF-7	Permit Requirement							
Cadmium, Total Recoverable (calc. limit as Cd ≤ C ₇₄₀₉ (amb-4.719)	Sample Measurement							
PARM Code 01113 S	Permit Requirement			Report Daily Maximum	µg/l		1/6 Months	Calculate
Mon. Site No. EFF-7	Permit Requirement							
Cadmium, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01113 T	Permit Requirement			0.00	µg/l		1/6 Months	Calculate
Mon. Site No. EFF-7	Permit Requirement			Daily Maximum				

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-03E

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Chromium, Total Recoverable (effluent)	Sample Measurement							
PARM Code 04262 R Mon. Site No. EFF-7	Permit Requirement			Report Daily Maximum	µg/l		1/6 Months	Grab
Chromium, Total Recoverable (calc. limit as Cr ≤ (0.819n _{Cr} + 0.6848))	Sample Measurement							
PARM Code 04262 S Mon. Site No. EFF-7	Permit Requirement			Report Daily Maximum	µg/l		1/6 Months	Calculat
Chromium, Total Recoverable	Sample Measurement							
PARM Code 04262 T Mon. Site No. EFF-7	Permit Requirement			0.00 Daily Maximum	µg/l		1/6 Months	Calculat
Copper, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01119 R Mon. Site No. EFF-7	Permit Requirement			Report Daily Maximum	µg/l		1/6 Months	Grab
Copper, Total Recoverable (calc. limit as Cu ≤ (0.8349n _{Cu} + 1.702))	Sample Measurement							
PARM Code 01119 S Mon. Site No. EFF-7	Permit Requirement			Report Daily Maximum	µg/l		1/6 Months	Calculat
Copper, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01119 T Mon. Site No. EFF-7	Permit Requirement			0.00 Daily Maximum	µg/l		1/6 Months	Calculat
Solids, Total Suspended	Sample Measurement							
PARM Code 00530 P Mon. Site No. EFF-7	Permit Requirement			Report Daily Maximum	mg/l		1/6 Months	Grab

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: _____
CLASS SIZE: _____

Final _____
Major _____

To: _____
REPORT: _____
GROUP: _____
Annual _____
Industrial _____

FACILITY: Martin Power Plant
LOCATION: Indianatown, FL 34956

COUNTY: Martin

MONITORING GROUP NUMBER: D-03D Sump 18
PLANT SIZE/TREATMENT TYPE: _____

☐ - check if no discharge for reporting period

Parameter	Sample Measurement	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement							
PARM Code 50050 1 Mon. Site No. EFF-6*	Permit Requirement	Report Monthly Average	mgd				Yearly	Totalize
Specific Conductance	Sample Measurement							
PARM Code 00095 1 Mon. Site No. EFF-6	Permit Requirement			1275	umhos/cm		Yearly	Grab
Oxygen Dissolved (DO)	Sample Measurement							
PARM Code 003000 1 Mon. Site No. EFF-6	Permit Requirement			5.0	mg/l		Yearly	Grab
Phosphorus, Total (as PO ₄)	Sample Measurement							
PARM Code 00665 1 Mon. Site No. EFF-6	Permit Requirement				mg/l		Yearly	Grab
Phosphate, Ortho (as P)	Sample Measurement							
PARM Code 70507 1 Mon. Site No. EFF-6	Permit Requirement				mg/l		Yearly	Grab
Nitrogen, Total (NH ₄)	Sample Measurement							
PARM Code 00600 1 Mon. Site No. EFF-6	Permit Requirement				mg/l		Yearly	Grab
Nitrogen, Nitrite, Total (as N)	Sample Measurement							
PARM Code 00615 1 Mon. Site No. EFF-6	Permit Requirement				mg/l		Yearly	Grab
Nitrogen, Nitrate, Total (as NO ₃)	Sample Measurement							
PARM Code 00620 1 Mon. Site No. EFF-6	Permit Requirement				mg/l		Yearly	Grab
Mercury, Total Recoverable	Sample Measurement							
PARM Code 71901 1 Mon. Site No. EFF-6	Permit Requirement			0.012	µg/l		Yearly	Grab

* Flow is a totalized value from sumps 15 through 20 and 24 through 26.

DISCHARGE MONITORING REPORT - PART A (Continued)

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-03D

Parameter	Sample Measurement	Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample T
Zinc, Total Recoverable (effluent) PARM Code 01094 1 Mon. Site No. EFF-6	Permit Requirement				Report Daily Maximum	µg/l		Yearly	Grab
Zinc, Total Recoverable (calc. limit as Zn $\leq 6^{(0.8473 \ln(PH-0.889))}$) PARM Code 01094 P Mon. Site No. EFF-6	Permit Requirement				Report Daily Maximum	µg/l		Yearly	Calculate
Zinc, Total Recoverable (effluent minus calculated limit) PARM Code 01094 Q Mon. Site No. EFF-6	Permit Requirement				0.00 Daily Maximum	µg/l		Yearly	Calculate
Lead, Total Recoverable (effluent) PARM Code 01114 1 Mon. Site No. EFF-6	Permit Requirement				Report Daily Maximum	µg/l		Yearly	Grab
Lead, Total Recoverable (calc. limit as Pb $\leq 6^{(1.273 \ln(PH-4.709))}$) PARM Code 01114 P Mon. Site No. EFF-6	Permit Requirement				Report Daily Maximum	µg/l		Yearly	Calculate
Lead, Total Recoverable (effluent minus calculated limit) PARM Code 01114 Q Mon. Site No. EFF-6	Permit Requirement				0.00 Daily Maximum	µg/l		Yearly	Calculate
Chloride (as Cl) PARM Code 00940 1 Mon. Site No. EFF-6	Permit Requirement				Report Daily Maximum	mg/l		Yearly	Grab
Sulfate, Total PARM Code 00923 1 Mon. Site No. EFF-6	Permit Requirement				Report Daily Maximum	mg/l		Yearly	Grab
Solids, Total Dissolved PARM Code 00945 1 Mon. Site No. EFF-6	Permit Requirement				Report Daily Maximum	mg/l		Yearly	Grab
Turbidity PARM Code 70295 1 Mon. Site No. EFF-6	Permit Requirement				Report Daily Maximum	mg/l		Yearly	Grab
Turbidity PARM Code 70070 1 Mon. Site No. EFF-6	Permit Requirement				Report Daily Maximum	Ntu		Yearly	Grab

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From:
LIMIT: Final
CLASS SIZE: Major

To:
REPORT: Yearly
GROUP: Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

COUNTY: Martin

MONITORING GROUP NUMBER: D-03E Sump 25
PLANT SIZE/TREATMENT TYPE:

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Samp Type
Specific Conductance	Sample Measurement							
PARM Code:00095 1 Mon. Site No. EFF-7	Permit Requirement			1275 Daily Maximum	µmhos/cm		Yearly	Grab
Oxygen Dissolved (DO)	Sample Measurement							
PARM Code:003000 1 Mon. Site No. EFF-7	Permit Requirement		5.0 Daily Minimum		mg/l		Yearly	Grab
Phosphorus, Total (as P)	Sample Measurement							
PARM Code:00665 1 Mon. Site No. EFF-7	Permit Requirement			Report Daily Maximum	mg/l		Yearly	Grab
Phosphate, Ortho (as PO ₄)	Sample Measurement							
PARM Code:70507 1 Mon. Site No. EFF-7	Permit Requirement			Report Daily Maximum	mg/l		Yearly	Grab
Nitrogen, Total	Sample Measurement							
PARM Code:00600 1 Mon. Site No. EFF-7	Permit Requirement			Report Daily Maximum	mg/l		Yearly	Grab
Nitrogen, Nitrite, Total (as NH ₄)	Sample Measurement							
PARM Code:00615 1 Mon. Site No. EFF-7	Permit Requirement			Report Daily Maximum	mg/l		Yearly	Grab
Nitrogen, Nitrate, Total (as N)	Sample Measurement							
PARM Code:00620 1 Mon. Site No. EFF-7	Permit Requirement			Report Daily Maximum	mg/l		Yearly	Grab
Mercury, Total Recoverable	Sample Measurement							
PARM Code:71901 1 Mon. Site No. EFF-7	Permit Requirement			0.012 Daily Maximum	µg/l		Yearly	Grab

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: D-03E

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample T.
Zinc, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01094 1	Permit Requirement			Report Daily Maximum	µg/l		Yearly	Grab
Mon. Site No. EFF-7	Sample Measurement							
Zinc, Total Recoverable (calc. limit as Zn ≤ (0.873µM ² -0.88%)	Sample Measurement							
PARM Code 01094 P	Permit Requirement			Report Daily Maximum	µg/l		Yearly	Calculate
Mon. Site No. EFF-7	Sample Measurement							
Zinc, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01094 Q	Permit Requirement			0.00 Daily Maximum	µg/l		Yearly	Calculate
Mon. Site No. EFF-7	Sample Measurement							
Lead, Total Recoverable (effluent)	Sample Measurement							
PARM Code 01114 1	Permit Requirement			Report Daily Maximum	µg/l		Yearly	Grab
Mon. Site No. EFF-7	Sample Measurement							
Lead, Total Recoverable (calc. limit as Pb ≤ (1.273µM ² -4.70%)	Sample Measurement							
PARM Code 01114 P	Permit Requirement			Report Daily Maximum	µg/l		Yearly	Calculate
Mon. Site No. EFF-7	Sample Measurement							
Lead, Total Recoverable (effluent minus calculated limit)	Sample Measurement							
PARM Code 01114 Q	Permit Requirement			0.00 Daily Maximum	µg/l		Yearly	Calculate
Mon. Site No. EFF-7	Sample Measurement							
Chloride (as Cl)	Sample Measurement							
PARM Code 00940 1	Permit Requirement			Report Daily Maximum	mg/l		Yearly	Grab
Mon. Site No. EFF-7	Sample Measurement							
Sodium	Sample Measurement							
PARM Code 00923 1	Permit Requirement			Report Daily Maximum	mg/l		Yearly	Grab
Mon. Site No. EFF-7	Sample Measurement							
Sulfate, Total	Sample Measurement							
PARM Code 00945 1	Permit Requirement			Report Daily Maximum	mg/l		Yearly	Grab
Mon. Site No. EFF-7	Sample Measurement							
Solids, Total Dissolved	Sample Measurement							
PARM Code 70295 1	Permit Requirement			Report Daily Maximum	mg/l		Yearly	Grab
Mon. Site No. EFF-7	Sample Measurement							
Turbidity	Sample Measurement							
PARM Code -00070 1	Permit Requirement			Report Daily Maximum	Ntu		Yearly	Grab
Mon. Site No. EFF-7	Sample Measurement							

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From:
LIMIT:
CLASS SIZE: Major

To:
REPORT:
GROUP: Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

MONITORING GROUP NUMBER: I-004 Units 1&2 Wastewater

PLANT SIZE/TREATMENT TYPE: Treatment System

COUNTY: Martin

☐ - check if no discharge for reporting period

Parameter	Sample Measurement	Report Monthly Average	Report Daily Maximum	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement								
PARM Code 50050 7	Permit Requirement			mgd				Monthly	Calculati
Mon Site No. INT-8	Sample								
Oil and Grease	Measurement								
PARM Code 00556 7	Permit Requirement				15.0	20.0		Monthly	Grab
Mon Site No. INT-8	Sample								
PH	Sample Measurement								
PARM Code 00400 7	Permit Requirement			6.0		9.0	su	Monthly	Grab
Mon Site No. INT-8	Sample								
Solids, Total Suspended	Sample Measurement								
PARM Code 00530 7	Permit Requirement				*30.0	*100.0	mg/l	1/6 Months	Grab
Mon Site No. INT-8	Sample								

*Enter in NOD19, if not required for that month

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd
Juno Beach, FL 33408

PERMIT NUMBER: FL0030988
MONITORING PERIOD From:
LIMIT: Final
CLASS SIZE: Major

To:
REPORT:
GROUP: Annual
Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

MONITORING GROUP NUMBER: D-05A Site Runoff
from Units 1&2

COUNTY: Martin

PLANT SIZE/TREATMENT TYPE:

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample Type
Solids, Total Suspended	Sample Measurement								
PARM Code 00530 1 Mon Site No. EFF-9	Permit Requirement			50.0	Daily Maximum	mg/l		1/6 Months	Grab
Turbidity	Sample Measurement								
PARM Code 00070 1 Mon Site No. EFF-9	Permit Requirement				Report Daily Maximum	ntu		1/6 Months	Grab
Flow	Sample Measurement								
PARM Code 50050 1 Mon Site No. EFF-9	Permit Requirement							Weekly	Calculation
pH	Sample Measurement								
PARM Code 00400 1 Mon Site No. EFF-9	Permit Requirement			6.0	Daily Minimum	su		Monthly	Grab

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE NO

DATE (YY/MM/DD)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Juno Beach, FL 33408

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: _____
CLASS SIZE: _____

To: _____ Annual _____ Industrial _____
REPORT: _____ GROUP: _____

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

MONITORING GROUP NUMBER: D-05E Site Runoff from
Ponds D1, E, F & G

PLANT SIZE/TREATMENT TYPE: _____

COUNTY: Martin

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample Type
Turbidity	Sample Measurement								
PARM Code 00070 P Mon Site No. EFF-10	Permit Requirement					Report Daily Maximum	ntu	1/6 Months	Grab
Solids Total Suspended	Sample Measurement								
PARM Code 00530 P Mon Site No. EFF-10	Permit Requirement					50.0 Daily Maximum	mg/l	1/6 Months	Grab
Flow	Sample Measurement								
PARM Code 50050 P Mon Site No. EFF-10	Permit Requirement								
pH	Sample Measurement								
PARM Code 00400 P Mon Site No. EFF-10	Permit Requirement					6.0 Daily Minimum	su	Monthly	Grab

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
 Juno Beach, FL 33408

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: _____
CLASS SIZE: _____

To: _____
REPORT: _____
GROUP: _____

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
 Indiantown, FL 34956

MONITORING GROUP NUMBER: D-05B Site Runoff Ponds

5B1 & 5B2

PLANT SIZE/TREATMENT TYPE:

COUNTY: Martin

☐ - check if no discharge for reporting period

Parameter	Sample Measurement	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Solids, Total Suspended	Sample Measurement							
PARM Code 00530 Q Mon Site No. EFF-11	Permit Requirement			50.0 Daily Maximum	mg/l		1/6 Months	Grab
Turbidity	Sample Measurement							
PARM Code 00070 Q Mon Site No. EFF-11	Permit Requirement			Report Daily Maximum	ntu		1/6 Months	Grab
Flow	Sample Measurement							
PARM Code 50050 Q Mon Site No. EFF-11	Permit Requirement	Report Daily Maximum	mgd				Weekly	Calculati
pH	Sample Measurement							
PARM Code 00400 Q Mon Site No. EFF-11	Permit Requirement		6.0 Daily Minimum	8.5 Daily Maximum	su		Monthly	Grab

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Juno Beach, FL 33408

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: Final
CLASS SIZE: Major

To: _____
REPORT: Annual
GROUP: Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

MONITORING GROUP NUMBER: D-05D Site Runoff
PLANT SIZE/TREATMENT TYPE: Pond D2

COUNTY: Martin

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Solids, Total Suspended	Sample Measurement							
PARM Code 00530 R Mon. Site No. EFF-12	Permit Requirement			50.0 Daily Maximum	mg/l		1/6 Months	Grab
Turbidity	Sample Measurement							
PARM Code 00070 R Mon. Site No. EFF-12	Permit Requirement			Report Daily Maximum	ntu		1/6 Months	Grab
Flow	Sample Measurement							
PARM Code 50050 R Mon. Site No. EFF-12	Permit Requirement	Report Daily Maximum	mgd				Weekly	Calculation
pH	Sample Measurement			6.0 Daily Minimum	su		Monthly	Grab
PARM Code 00400 R Mon. Site No. EFF-12	Permit Requirement			8.5 Daily Maximum				

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: Final _____
CLASS SIZE: Major

To: _____
REPORT: Monthly
GROUP: Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

MONITORING GROUP NUMBER: I-06A Domestic Waste
Treatment Plant Units 1&2

PLANT SIZE/TREATMENT TYPE:

COUNTY: Martin

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Measurement									
PARM Code 50050 Y	Permit Requirement	0.01 Annual Average	mgd						5 days/week	Flow meter
Mon. Site No. INT-13	Sample									
BOD, Carbonaceous 5 day, 20C	Measurement									
PARM Code 80082 Y	Permit Requirement	20 Annual Average	mg/l						Monthly	Grab
Mon. Site No. INT-13	Sample									
BOD, Carbonaceous 5 day, 20C	Measurement									
PARM Code 80082 Y	Permit Requirement	40 Weekly Average	mg/l						Monthly	Grab
Mon. Site No. INT-13	Sample									
Solids, Total Suspended	Measurement									
PARM Code 00530 Y	Permit Requirement	20 Annual Average	mg/l						Monthly	Grab
Mon. Site No. INT-13	Sample									
Solids, Total Suspended	Measurement									
PARM Code 00530 Y	Permit Requirement	45 Weekly Average	mg/l						Monthly	Grab
Mon. Site No. INT-13	Sample									

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: J-106A

Parameter	Sample Measurement	Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample Type
Coliform, Fecal (General)	Sample Measurement								
PARM Code: 74055 7 Mon Site No. INT-13	Permit Requirement			200 Max Annual Average		800 Daily Maximum	#/100ml	Monthly	Grab
Chlorine, Total Residual	Sample Measurement								
PARM Code: 50060 7 Mon Site No. INT-13	Permit Requirement			0.5 Minimum			mg/l	5 days/week	Grab
pH	Sample Measurement								
PARM Code: 00400 7 Mon Site No. INT-13	Permit Requirement			6.0 Daily Minimum		9.0 Daily Maximum	su	5 days/week	Grab
Flow	Sample Measurement								
PARM Code: 50050 G Mon Site No. INT-1	Permit Requirement	0.01 Annual Average	mgd					5 days/week	Meters c Pumps
BOD, Carbonaceous 5 day, 20C	Sample Measurement								
PARM Code: 80082 G Mon Site No. INT-1	Permit Requirement						mg/l	Monthly	Grab
Solids, Total Suspended	Sample Measurement								
PARM Code: 00530 G Mon Site No. INT-1	Permit Requirement						mg/l	Monthly	Grab

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: Final _____
CLASS SIZE: Major

To: _____
REPORT: _____
GROUP: Monthly
Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

MONITORING GROUP NUMBER: I-06 B Domestic Waste
Treatment Plant Units 3&4

PLANT SIZE/TREATMENT TYPE:

COUNTY: Martin

☐ - check if no discharge for reporting period

Parameter		Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Ty
Flow	Sample							
PARM Code 50050 P Mon. Site No. INT-14	Measurement Permit Requirement	0.005 Annual Average	mgd				5 days/week	Flow meter
BOD, Carbonaceous 5 day, 20C	Sample							
PARM Code 80082 P Mon. Site No. INT-14	Measurement Permit Requirement	20 Annual Average	mg/l				Monthly	Grab
BOD, Carbonaceous 5 day, 20C	Sample							
PARM Code 80082 Q Mon. Site No. INT-14	Measurement Permit Requirement	40 Weekly Average	mg/l	25 Monthly Average	60 Maximum		Monthly	Grab
Solids, Total Suspended	Sample							
PARM Code 00530 P Mon. Site No. INT-14	Measurement Permit Requirement	20 Annual Average	mg/l				Monthly	Grab
Solids, Total Suspended	Sample							
PARM Code 00530 Q Mon. Site No. INT-14	Measurement Permit Requirement	45 Weekly Average	mg/l	30 Monthly Average	60 Maximum		Monthly	Grab

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY NAME: Martin Power Plant

PERMIT NUMBER: FL0030988

MONITORING GROUP NUMBER: 1-06 B

Parameter		Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample 1
Fecal Coliform (Bacteria)	Sample Measurement								
PARM Code 74055 P Mon. Site No. INT-14	Permit Requirement		200 Max Annual Average		800 Daily Maximum	#/100ml		Monthly	Grab
pH	Sample Measurement								
PARM Code 00400 P Mon. Site No. INT-14	Permit Requirement		6.0 Daily Minimum		9.0 Daily Maximum	su		5 days/week	Grab
Chlorine, Total Residual	Sample Measurement								
PARM Code 50060 P Mon. Site No. INT-14	Permit Requirement		0.5 Minimum			mg/l		5 days/week	Grab
BOD, Carbonaceous 5 day, 20C	Sample Measurement								
PARM Code 80082 R Mon. Site No. INF-2	Permit Requirement					mg/l		Monthly	Grab
Solids, Total Suspended	Sample Measurement								
PARM Code 00530 R Mon. Site No. INF-2	Permit Requirement					mg/l		Monthly	Grab

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: Final
LIMIT: Major
CLASS SIZE:

To: Monthly
REPORT: Industrial
GROUP:

FACILITY: Martin Power Plant
LOCATION: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

MONITORING GROUP NUMBER: I-007 Combined Cycle
PLANT SIZE/TREATMENT TYPE: Wastewater Treatment System

COUNTY: Martin

☐ - check if no discharge for reporting period

Parameter	Sample Measurement	Report Monthly Average	Report Daily Maximum	Units mgd	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement								
PARM Code 50050 Mon. Site No. INT-15	Permit Requirement	Monthly Average	Daily Maximum	mgd				Monthly	Record
Oil and Grease	Sample Measurement								
PARM Code 00556 Mon. Site No. INT-15	Permit Requirement				15.0	20.0	mg/l	Monthly	Grab
pH	Sample Measurement								
PARM Code 00400 Mon. Site No. INT-15	Permit Requirement				6.0	9.0	su	Monthly	Grab
Solids, Total Suspended	Sample Measurement								
PARM Code 00530 Mon. Site No. INT-15	Permit Requirement				*30.0	*100.0	mg/l	1/6 Months	Grab

* Enter in NODD, if not require for that month

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indianatown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From:
LIMIT: Final
CLASS SIZE: Major

To:
REPORT: Annual
GROUP: Industrial

FACILITY: Martin Power Plant
LOCATION: 21900S.W. Warfield Blvd.
Indianatown, FL 34956

MONITORING GROUP NUMBER: I-008 Metal Cleaning
Waste Pretreatment

PLANT SIZE/TREATMENT TYPE:

COUNTY: Martin

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample T.
Flow	Measurement							
PARM Code 50050 7 Mon. Site No. INT-16	Permit Requirement	Report Monthly Total	mgd				Continuous	Record
Oil and Grease	Sample							
PARM Code 00556 7 Mon. Site No. INT-16	Permit Requirement	Report Monthly Average		15.0 Monthly Average	20.0 Daily Maximum	mg/l	Daily	Composit
Solids, Total Suspended	Sample							
PARM Code 00530 7 Mon. Site No. INT-16	Permit Requirement			30.0 Monthly Average	100.0 Daily Maximum	mg/l	Daily	Composit
Copper, Total Recoverable	Sample							
PARM Code 01119 7 Mon. Site No. INT-16	Permit Requirement			1.0 Monthly Average	1.0 Daily Maximum	mg/l	Daily	Composit
Iron, Total Recoverable	Sample							
PARM Code 00980 7 Mon. Site No. INT-16	Permit Requirement			1.0 Monthly Average	1.0 Daily Maximum	mg/l	Daily	Composit
Batches	Sample							
PARM Code 04138 7 Mon. Site No. INT-16	Permit Requirement	Report Monthly Total	number				1/batch	Logs

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: 21900 S.W. Warfield Blvd.
Indiantown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: _____
LIMIT: Final
CLASS SIZE: Major

To: _____
REPORT: _____
GROUP: Annual
Industrial

FACILITY: Martin Power Plant
LOCATION: 21900 s.w. Warfield Blvd.
Indiantown, FL 34956

MONITORING GROUP NUMBER: I-009 Coal, Limestone and
Sulfur Handling Area Runoff

PLANT SIZE/TREATMENT TYPE:

COUNTY: Martin

☐ - check if no discharge for reporting period

Parameter	Sample	Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample T
Flow	Measurement								
PARM Code 50050 7 Mon Site No. INT-17	Permit Requirement	Report Daily Maximum	mgd					Weekly	Recorder Calculation
Oil and Grease	Sample								
PARM Code 00556 7 Mon Site No. INT-17	Permit Requirement							Monthly	Grab
Solids, Total Suspended	Sample								
PARM Code 00530 7 Mon Site No. INT-17	Permit Requirement							Weekly	Grab
pH	Sample								
PARM Code 00400 7 Mon Site No. INT-17	Permit Requirement							Weekly	Grab

1 See permit for conditions in which this limitation is applicable.

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: P.O. Box 176
Indiantown, FL 34956

FACILITY: Martin Power Plant
LOCATION: 5 miles Northwest of Indiantown off SR710
Indiantown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From: Final
LIMIT: Major
CLASS SIZE: Major

To: REPORT: Annual
GROUP: Industrial

COUNTY: Martin

MONITORING GROUP NUMBER: I-010 Slag Handling
PLANT SIZE/TREATMENT TYPE: Storage Area Runoff



- check if no discharge for reporting period

Parameter	Sample Measurement	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement							
PARM Code 50050 P	Permit Requirement	Report Daily Maximum	mgd				Weekly	Recorder Calculated
Mon. Site No. INT-18	Sample Measurement							
Oil and Grease	Permit Requirement						Monthly	Grab
PARM Code 00556 P	Sample Measurement							
Mon. Site No. INT-18	Permit Requirement							
pH	Sample Measurement							
PARM Code 00400 P	Permit Requirement						Weekly	Grab
Mon. Site No. INT-18	Sample Measurement							
Solids, Total Suspended	Permit Requirement							
PARM Code 00530 P	Sample Measurement							
Mon. Site No. INT-18	Permit Requirement							

1 See permit for conditions in which this limitation is applicable.

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Wastewater Facilities Management Section, MS 3551, 2600 Blair Stone Road, Tallahassee, FL 32399-2400

PERMITTEE NAME: Florida Power & Light Company
MAILING ADDRESS: P.O. Box 176
Indianatown, FL 34956

PERMIT NUMBER: FL0030988
MONITORING PERIOD From:
LIMIT:
CLASS SIZE:
Major

To:
REPORT:
GROUP:
Annual
Industrial

FACILITY: Martin Power Plant
LOCATION: 5 miles Northwest of Indianatown off SR710
Indianatown, FL 34956

MONITORING GROUP NUMBER: I-013 Construction
Dewatering Water

PLANT SIZE/TREATMENT TYPE:
 ☐ - check if no discharge for reporting period

COUNTY: Martin

Parameter	Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Typ
Flow	Sample Measurement						
PARM Code 50050 7 Mon Site No. INT-19	Permit Requirement	Report Daily Maximum	mgd			Daily	Totalizer or Calculation
Solids, Total Suspended	Sample Measurement						
PARM Code 00530 7 Mon Site No. INT-19	Permit Requirement		50.0 Daily Maximum	mg/l		Weekly	Grab
Turbidity	Sample Measurement						
PARM Code 00070 7 Mon Site No. INT-19	Permit Requirement		Report Daily Maximum	ntu		Weekly	Grab
pH	Sample Measurement						
PARM Code 00400 7 Mon Site No. INT-19	Permit Requirement	6.0 Daily Minimum	9.0 Daily Maximum	su		Weekly	Grab

Sample Point	Description of Monitoring Location
EFF-1	Nearest accessible point after final treatment, but prior to mixing with the receiving water.
EFF-1A	At the edge of a mixing zone in the Intake/Canal which extend 400 meters from the spillway gates and that point to the intake structure.
EFF-3	At Outfall from Weir "a" (D-02B)
EFF-4	At Outfall from Weir "b" (D-02C)
EFF-5	At Outfall from Weir "c" (D-02D)
EFF-6	At Outfall from sumps 15-20 (D-03D), Sump 18 (for iron sampling sump 17 if discharging)
EFF-7	At Outfall from sumps 24-26 (D-03E), Sump 25
INT-8	Wastewater treatment system discharge prior to combination with any other waste stream or to the cooling pond.
EFF-9, 10, 11, 12	Point of Discharge from D-05A, D-05E, D-05B, and D-05D respectively prior to any mixing with any other waste stream or the East Perimeter Ditch prior to mixing with any other waste stream or the St. Lucie Canal.
INT-13	Effluent holding tank after filtration in the treatment plant. (for unit 1 and 2)
INT-14	Effluent pipe to the cooling pond exiting from the existing treatment plant. (for units 3 and 4)
INF-1	Influent to sewage plant (for units 1 and 2). The influent pump station of the newly constructed treatment plant.
INF-2	Influent to sewage plant (for units 3 and 4). The influent pump station of the treatment plant.
INT-15	Wastewater treatment system effluent discharge prior to combination with any other waste stream discharge to the cooling pond.
INT-16	Metal Cleaning Waste Treatment Facility effluent prior to mixing with any other waste stream or discharge to the cooling pond. Batches shall be reported only if wastes are treated in discrete batches.
INT-17	Point of discharge from each discharge/treatment system prior to mixing with any other waste stream or discharge to the cooling pond. (Outfall I-009)
INT-18	Point of discharge from each discharge/treatment system prior to mixing with any other waste stream or discharge to the cooling pond. (Outfall I-010)
INT-19	Point of discharge prior to mixing with any other waste stream or discharge to the cooling pond.

INSTRUCTIONS FOR COMPLETING THE WASTEWATER DISCHARGE MONITORING REPORT

The DMR consists of four parts--A, B, C, and D--all of which may or may not be applicable to every facility. Facilities may have one or more Part A's for reporting effluent data. All domestic wastewater facilities will have B for reporting daily sample results. Part C is only applicable for domestic wastewater facilities with limited wet weather discharges permitted under Chapter 62-610.860, F.A.C. Part D is used for reporting ground monitoring well data.

Hard copies and/or electronic copies of the required parts of the DMR were provided with the permit. All required information shall be typed or printed in ink.

In addition to filling in numerical results on various parts of the DMR, the following codes should be used and an explanation provided where appropriate. Note: Codes used by the lab for raw data may be different.

CODE	DESCRIPTION/INSTRUCTIONS	CODE	DESCRIPTION/INSTRUCTIONS
ANC	Analysis not conducted.	NOD	No discharge from/to site.
DRY	Dry Well	OPS	Operations were shutdown so no sample could be taken.
FLD	Flood disaster.	OTH	Other. Please enter an explanation of why monitoring data were not available.
IFS	Insufficient flow for sampling.	SEF	Sampling equipment failure.
LS	Lost sample.	TNTC	Too numerous too count (for fecal coliform bacteria only).
MNR	Monitoring not required this period since limit is conditional.		

When reporting analytical results that fall below a laboratory's reported method detection limits or practical quantification limits, the following instructions and code should be used:

CODE	DESCRIPTION/INSTRUCTIONS
<	If the sampled value is less than the method detection limit (MDL), enter a less than sign followed by the laboratory's MDL value, e.g. < 0.001. In cases where a laboratory reports a value, which is less than the parameter's practical quantification limit (PQL), but not less than the MDL, the value should be reported as the laboratory's MDL value. For example, where the MDL = 0.001, the PQL = 0.005 and the laboratory reports <0.005 (the PQL), the value of 0.001 should be reported on the DMR.

PART A -DISCHARGE MONITORING REPORT (DMR)

Part A of the DMR is comprised of one or more sections, each having its own header information. Facility information is preprinted in the header as well as the monitoring group number, whether the limits and monitoring requirements are interim or final, and the required submittal frequency (e.g. monthly, annually, quarterly, etc.) Submit Part A based on the required reporting frequency in the header and the instructions shown in the permit. The following blanks in the header should be completed by the permittee or authorized representative:

No Discharge From Site: Check this box if no discharge occurs and, as a result, there are no data or codes to be entered for all of the parameters on the DMR for the entire monitoring group number. If there was no discharge (effluent for a particular outfall, reuse, or land application system and the DMR monitoring group includes other monitoring locations (e.g., influent sampling), the "NOD" code should be used to individually denote those parameters for which there was no discharge.

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Sample Measurement: Before filling in sample measurements in the table, check to see that the data collected correspond to the limit indicated on the DMR (i.e. interim or final) and that the data correspond to the monitoring group number in the header. Enter the data or calculated results for each parameter on this row. Be sure the result being entered corresponds to the appropriate statistical base code (e.g. annual average, monthly average, single sample maximum, etc.).

No. Ex.: Enter the number of sample measurements during the monitoring period that exceeded the permit limit for each parameter. If none, enter zero.

Frequency of Analysis: The shaded areas in this column contain the minimum number of times the measurement is required to be made according to the permit. Enter the actual number of times the measurement was made in the space above the shaded area.

Sample Type: The shaded areas in this column contain the type of sample (e.g. grab, composite, continuous) required by the permit. Enter the actual sample type that was taken in the space above the shaded area.

Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

Comment and Explanation of Any Violations: Use this area to explain any exceedances, any upset or by-pass events, or other items which require explanation. If more space is needed, reference all attachments in this area.

PART B - DAILY SAMPLE RESULTS

Month/Year: Enter the month and year during which the data on this report were collected and analyzed.

Three-month Average Daily Flow: Calculate and enter the three-month average daily flow to the treatment facility.

(TMADFP/Permitted Capacity) x 100: Divide the three-month average daily flow by the permitted capacity of the treatment facility, multiply by 100, and enter this value.

Daily Monitoring Results: Record the results of daily monitoring for the parameters required to be sampled by your permit. Record the data in the units indicated.

Plant Staffing: List the name, certificate number, and class of all state certified operators operating the facility during the monitoring period. Use additional sheets as necessary.

Type of Effluent Disposal or Reclaimed Water Reuse: Enter the type of effluent disposal or reclaimed water reuse (e.g. surface water discharge, ocean outfall, slow rate land application-public access, slow rate land application restricted public access, rapid rate land application, absorption field, underground injection).

Limited Wet Weather Discharge Activated: If this plant does not have a limited wet weather discharge permitted under the provision of Rule 62-610.860, F.A.C., check 'Not Applicable.' If the plant activated the wet weather discharge during the reporting month, check 'Yes' and attach PART C - LIMITED WET WEATHER DISCHARGE.

PART C - LIMITED WET WEATHER DISCHARGE

This part is to be completed and submitted each month reclaimed water or effluent is discharged by a limited wet weather discharge permitted under Rule 62-610.860, F.A.C. For months with no discharge, Part C need not be submitted. All information is to be provided for each day on which the limited wet weather discharge was activated.

Month/Year: Enter the month and year during which the data on this report were collected and analyzed.

Rainfall Information: Enter the name and location of the rainfall gauging station, the source of climatological (normal rainfall) data, the cumulative rainfall for the average rainfall year, and the cumulative rainfall to date for calendar year. The cumulative rainfall for the average rainfall year is the amount of rain, in inches, which falls during an average rainfall year from January through the month for which this part contains data. The cumulative rainfall to date for this calendar year is the total amount of rain, in inches, that has been recorded since January 1 of the current year through the month for which this DMR contains data.

Date: Enter the date on which the discharge occurred.

Duration of Discharge: Enter the number of hours, to the nearest 0.1, of an hour (0.1 hr. = 6 min.) during each day of discharge that reclaimed water was actually discharged to surface waters.

Gallons Discharged: Enter the quantity in millions of gallons of reclaimed water discharged during the period shown in duration of discharge. Show the units as millions of gallons (mg), accurate to the nearest 0.01.

Average Discharge Flow Rate: Divide gallons discharged by duration of discharge (converted into days). Record in million gallons per day (MGD).

Average Upstream Flow Rate: Enter the average flow rate in the receiving stream upstream from the point of discharge for the period shown in duration of discharge. The average flow rate can be calculated based on measurements, one made at the start and one made at the end of the discharge period. Measurements are to be made at the upstream gauging station described in the permit.

Stream Dilution Factor: Enter the actual stream dilution ratio accurate to the nearest 0.1. To calculate the factor, divide the average upstream flow rate by the average discharge flow rate.

CBOD₅: Enter the average CBOD₅ of the reclaimed water discharged during the period shown in duration of discharge.

TKN: Enter the average TKN of the reclaimed water discharged during the period shown in duration of discharge.

Total P: Enter the cumulative number of days since January 1 of the current year during which the limited wet weather discharge was activated divided by the total number of days since January 1 of the current year multiplied by 100%.

Reason for Discharge: Provide a brief explanation of the factors contributing to the need to activate the limited wet weather discharge.

PART D - GROUND WATER MONITORING REPORT

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Date Sample Obtained: Enter the date the sample was taken. Also, check whether or not the well was purged before sampling.

Sampling Methods: Indicate the procedure used to collect the sample (e.g. airlift, bucket/dailer, centrifugal pump, etc.)

Samples Filtered: Indicate whether the sample obtained was filtered by laboratory (L), filtered in field (F), or unfiltered (N).

Preservatives Added: State what preservatives were added to the sample.

Analysis Method: Indicate the analytical method used. Record the method number from Chapter 62-160 or Chapter 62-601, F.A.C., or from other sources.

Analysis Result/Units: Record the results of the analysis. If the result was below the minimum detection limit, indicate that. Enter the units associated with the results of the analysis.

Detection Limits/Units: Record the detection limits of the analytical methods used and the units associated with them.

Comments and Explanations: Use this space to make any comments on or explanations of results which are unexpected. If more space is needed, reference all attachments in this area.

**BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

IN THE MATTER OF:

Florida Power & Light Company
6501 S. Ocean Drive
Jensen Beach, FL 34957

Administrative Order No. AO-015-TL

Martin Power Plant
DEP Permit No: FL0030988

ADMINISTRATIVE ORDER

I. STATUTORY AUTHORITY

The Department of Environmental Protection (Department) issues this Administrative Order under the authority of Section 403.088(2)(f), Florida Statutes (F.S.). The Secretary of the Department has delegated this authority to the Director of the Division of Water Resources Management, who issues this order and makes the following findings of fact.

II. FINDINGS OF FACT

1. Florida Power & Light (FPL) (Permittee) is a "person" as defined under Section 403.031(5), F.S.
2. The Permittee owns and operates a steam electric power generating facility known as the FPL Martin Power Plant, located at 5 miles Northwest of Indiantown off SR710, Martin County, Florida 34956, which discharges industrial wastewater into waters of the state as defined in Section 403.031(13), F.S.
3. The Permittee has filed a timely application for a permit renewal, permit number FL0030988 (Permit), under Section 403.088(2), F.S.
4. Previous sampling of the discharge to Barley Barber Swamp have shown that the effluent concentrations of iron has a reasonable potential to exceed the water quality criteria for class III waters established in Rule 62-302.530 of the Florida Administrative Code (F.A.C.).
5. The Facility does not routinely add any chemical additives which contain iron.
6. Sections 403.088(2)(e) and (f), F.S., allow the Department to issue a permit for the discharge of wastewater which may not meet all applicable rule requirements, into waters of the state, if the permit is accompanied by an order establishing a schedule for achieving compliance with all permit conditions if criteria specified in the order are met.
7. The Department finds that in this case:
 - (1) The applicant needs permission to pollute the waters within the state for a period of time necessary to complete research, planning, construction, installation or operation of an approved pollution abatement facility or alternative waste disposal system.

- (2) There is no present, reasonable, alternative means of disposing of the waste other than by discharging it into the waters of the state;
- (3) The granting of an operation permit will be in the public interest; and
- (4) The discharge will not be unreasonably destructive to the quality of the receiving waters.

III. ORDER

Based on the foregoing findings of fact,

IT IS ORDERED,

8. No later than 90 days after the effective date of this Order, the Permittee shall prepare and submit for the Department's review and approval a feasibility study report (Report) for the evaluation of engineering options to comply with the iron limitation in Part I.A.16. of the Permit. The options shall be ranked based on equal weighting of technical and economic feasibility. The results of the ranking shall be presented in the Report. In addition, the Report shall include a plan and schedule for implementing the highest ranked option. The schedule shall include milestones and the completion date. The implementation shall take no longer than 36 months from the effective date of this Order.
9. The Permittee shall provide a status report demonstrating progress toward compliance with the iron limitation every six months following the approval of the plan, until compliance is achieved pursuant to paragraph III.7. of this Order. The status reports shall document accomplishment of milestones established by the schedule in the approved plan.
10. Until compliance with the iron limitations in Part I.A.16. of the Permit is achieved as required in paragraph III.8. of this Order, the Permittee shall comply with an interim iron limit of 4.8 mg/L at the discharge from Outfall D-03D.
11. Monitoring results shall be submitted in accordance with the Permit.
12. The Permittee shall maintain and operate its facilities in compliance with all other conditions of the Permit.
13. This order may be modified through revisions as set forth in Chapter 62-620, F.A.C.
14. Unless otherwise specified herein, reports or other information required by this order shall be sent to: Industrial Wastewater Section, ATTN: Mail Station 3545, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, with a copy sent to: Industrial Wastewater Section, Department of Environmental Protection, Southeast District, 1801 SE Hillmoor Drive, Suite C-204, Port St. Lucie, Florida 34952.
15. Sampling and monitoring data shall be in accordance with condition VIII.18 of the Permit.
16. This order does not operate as a permit under section 403.088 of the Florida Statutes. This order shall be incorporated by reference into permit number FL0030988, which shall require compliance by the Permittee with the requirements of this order.
17. If any event occurs that causes delay or the reasonable likelihood of delay in complying with the requirements of this order, the Permittee shall have the burden of demonstrating that the delay was or will be caused by circumstances beyond the reasonable control of the Permittee and could not have been or cannot be overcome by the Permittee's due diligence. Economic circumstances shall not be considered circumstances beyond the reasonable control of the Permittee, nor shall the failure of a contractor,

subcontractor, materialman or other agent (collectively referred to as "contractor") to whom responsibility for performance is delegated to meet contractually imposed deadlines be a cause beyond the control of the Permittee, unless the cause of the contractor's late performance was also beyond the contractor's control. Delays in final agency action on an application for a relief mechanism are eligible for consideration under this paragraph, provided that none of those delays were a result of late submission of information by the Permittee. Upon occurrence of an event causing delay, or upon becoming aware of a potential for delay, the Permittee shall notify the Department orally at: the Department's Southeast District office, (561) 681-6600 within 24 hours or by the next working day and shall, within seven calendar days of oral notification to the Department, notify the Department in writing at: Southeast District office, 400 North Congress, West Palm Beach, Florida 33401 of the anticipated length and cause of the delay, the measures taken or to be taken to prevent or minimize the delay and the timetable by which Facility intends to implement these measures. If the delay or anticipated delay has been or will be caused by circumstances beyond the reasonable control of the Permittee, the time for performance hereunder shall be extended for a period equal to the delay resulting from such circumstances.

18. Failure to comply with the requirements of this order shall constitute a violation of this order and DEP permit number FL0030988 and may subject the Permittee to penalties as provided in section 403.161 of the Florida Statutes.
19. This order is final when filed with the clerk of the Department, and Florida Power & Light- Martin Plant then shall implement this order unless a petition for an administrative proceeding (hearing) is filed in accordance with the notice set forth in the following section.

IV. NOTICE OF RIGHTS

A person whose substantial interests are affected by the Department's decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the F.S. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Petitions by the applicant or any of the parties listed below must be filed within twenty-one days of receipt of this written notice. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within twenty-one days of publication of the notice or within twenty-one days of receipt of the written notice, whichever occurs first.

Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within twenty-one days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name, address, and telephone number of each petitioner; the Department permit identification number and the county in which the subject matter or activity is located;
- (b) A statement of how and when each petitioner received notice of the Department action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department action;
- (d) A statement of the material facts disputed by the petitioner, if any;
- (e) A statement of facts that the petitioner contends warrant reversal or modification of the Department action;

(f) A statement of which rules or statutes the petitioner contends require reversal or modification of the Department action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

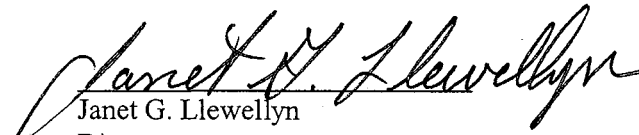
Mediation under Section 120.573, F.S., is not available for this proceeding.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition this order will not be effective until further order of the Department.

Any party to the order has the right to seek judicial review of the order under Section 120.68, F.S., by the filing of a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department.

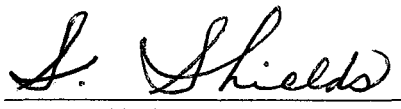
DONE AND ORDERED on this 13th day of June 2008 in Tallahassee, Florida.

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**


Janet G. Llewellyn
Director

Division of Water Resource Management

FILED AND ACKNOWLEDGED on this date, under Section 120.52(7) of the Florida Statutes, with the designated Department Clerk, receipt of which is acknowledged.


Clerk

06-18-08
Date

Copies furnished to Permit Distribution List